Calculating Damages in Broker Raiding Cases

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Introduction

When a securities broker or dealer "raids" another firm's branch office or trading desk, it improperly hires away a significant number of the raided firm's producers. This act deprives the raided firm of the producers' services and the profits it could reasonably expect to earn during the time period the producers would remain in its employ but for the raid. The raided firm may file a statement of claim with the National Association of Securities Dealers ("NASD") against the raiding firm. When a raiding case proceeds to arbitration, the amount of lost profits

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is a critical issue considered by the arbitration panel. A lost profits analysis calculates the amount of profits the *Claimant* (or raided firm) lost that is directly attributable to the raid. This represents the amount of the cash payment the *Respondent* (or raiding firm) needs to make to restore the Claimant to the same economic position it would occupy but for the raid.

Unfortunately, in the securities industry, arbitration panels are not required to, and do not, articulate the reasoning behind a finding of liability or how the damage award was determined. As a result, the damage awards made by securities industry arbitration panels differ widely within the industry—worse, there is an apparent lack of correlation between arbitration damage awards and the actual damages incurred by Claimant firms in any particular case.[1] This inconsistency suggests that Claimants are not always properly compensated. And because these cases are decided exclusively in arbitration, rather than litigated in the courts, there is no body of published case law to which arbitrators, advocates, and parties can turn in order to consult benchmark damage awards in similar cases.[2]

We believe that flawed or biased damage calculations are often responsible for the inconsistent arbitration awards in broker raiding cases.[3] The securities industry's arbitration process seems particularly susceptible to "speculative possibilities imaginatively shaped"[4] by the wizards of Wall Street. Making matters

[1] Because most raiding claims are decided in an arbitration setting, there is little information on the damage analyses available in the public record. However, this lack of correlation has been observed by the authors, who have collectively been involved in over thirty raiding claims since the early 1980s as either expert witnesses on issues of damages, mediators, or advocates of parties to a raiding claim. Collectively, we have observed damage awards that range from $10,000 to $22 million, excluding punitive awards. Confidentiality prohibits the authors from discussing the specifics of any case which is not part of a public record.

[2] Because there is no published case law regarding broker raiding cases, advocates presenting cases to securities arbitrators commonly cite lost profits cases in other areas of law as persuasive authority. The cases cited in this article likewise discuss lost profits damages calculations outside the securities arbitration arena, but our experience is that arbitrators consider such case law to be generally applicable in the broker raiding context.

[3] Judge Posner's statement appears apt: "We have expressed our concern in recent cases with the casualness with which parties sometimes approach the question of damages—too often treating it as a question appropriately answered (on the plaintiff's side) through the piling on of speculative possibilities imaginatively shaped by a compliant expert witness and (on the defendant's side) by nitpicking and sheer denial. We are not alone in the concern with irresponsible expert evidence on damages." Patton v. Mid-Continent Sys., Inc., 841 F.2d 742, 748 (7th Cir. 1988) (internal citations omitted).

[4] *Id.*

even worse, securities arbitrators may lack the commercial background or financial training to assess the expert damages analyses and testimony derived from such speculative possibilities, which usually combine the jargon of the Street with the sophisticated application of economic and financial theory to accounting statement data. Consequently, the arbitrators' damage awards may bear no direct relation to the actual damages suffered.

The purpose of this article is to bring consistency and rationality to the award of damages in "raiding" cases. We provide a resource for arbitrators, practitioners, and other parties that brings together the legal principles applied during arbitrations, the fact patterns specific to broker raiding cases, and a recommended framework for determining the proper amount of lost profits damages suffered by a Claimant broker or dealer as a result of a competitor firm's raid. The article will thus assist the parties in presenting to an arbitration panel a lost profits damage analysis that is grounded in the fundamental principles of economics and finance, appropriately based on the books and records of the Claimant, and consistent with the teachings of relevant case law.

The remainder of this article is organized as follows: Part I discusses a working definition of "raiding." There is not a consistent consensus among the legal community as to what constitutes raiding. This Part discusses the current legal thought on this issue, including areas of general agreement and disagreement as to what constitutes a raid. The definition of a raid has a direct bearing on the evaluation and calculation of damages in a raiding case. In Part II, we present a theoretical framework for calculating damages in a raiding case that is consistent with fundamental principles of economics and finance, yet specific to the legal claims that arise in the context of a raiding claim. In Part III, we recommend a method for estimating the amount of lost profits damages suffered by a Claimant broker or dealer as a result of a competitor firm's raid. Part IV discusses how to convert future lost profits to current dollars using a present value method. Finally, Part V presents an example where we apply our recommended method for estimating lost profits damages to a hypothetical raiding claim.

I. Definition of Raiding

In a field where authorities have difficulty agreeing upon the very definition of raiding, how does a practitioner or party know when the case at hand involves a raiding claim? A recent legal conference on raiding in the securities industry

attempted to answer this very question, eventually defining *raiding* as a "compensable hiring of producers in a definable business unit of one firm by a competing firm."[5]

A. Areas of Agreement

Although no single set of criteria for determining whether a raid has occurred achieved the endorsement of a majority, the conference participants *were* able to agree on certain attributes of a raid. Specifically, the Conference Report noted that a majority of the participants believed that raiding should be considered an independent cause of action.[6] The overwhelming majority of the participants agreed that proving a raiding claim requires showing that a "severe economic impact" resulted and that the alleged raider's behavior involved "malice/predation" and/or "improper means"; that a "severe impact" may be found where the alleged improper hiring involves at least 40 percent of the business unit's production; that successive departures can be considered part of a raid if there is evidence that the subsequent departures were part of a single hiring plan, or if the departures occur within 30 days (some argued for periods as long as 90 days); and that a branch office manager cannot be involved in a joint departure from the raided firm without violating his duty of loyalty to the raided firm.[7]

The Conference Report also noted that a substantial majority of the participants supported the "life boat" defense.[8] That is, if the Respondent can establish that (a) the producers it hired from the Claimant were intent on leaving the Claimant for "honestly held and objectively verifiable and substantial reasons," (b) the producers approached the Respondent and made their intent and their reasons for wanting to leave clear, and (c) the Respondent determined in good faith that the producers would accept employment somewhere else if the Respondent did not hire them, then the Respondent would not commit a raid by hiring these producers.[9]

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[5] Saul Ewing LLP, Raiding in the Securities Industry: The Search for Consensus, Conference Report 2-3 (2003) (hereinafter "Conference Report"), *available at* http://saul.com/common/publications/pdf_531.pdf.

[6] At present, a claim for raiding is often framed as a claim for breach of contract, tort, or breach of fiduciary duty. Claims involving a branch office manager generally include a claim for breach of fiduciary duty against the manager.

[7] Conference Report, *supra* note 5, at 19-20.

[8] *Id*. at 19.

[9] *Id*. at 28.

B. Areas of Disagreement

The Conference Report also discussed three issues on which there was substantial disagreement: (a) whether a one-person office could be raided, (b) how to treat satellite offices, and (c) how to treat an office in decline.[10] The first issue concerns whether a raid can occur when only one producer is hired away. In a one-producer office, the departure of that producer can cause substantial harm to the business. Until that producer is replaced, virtually the entire revenue stream of the business is lost. However, the revenue stream in a one-producer office will bear substantial risk even in the absence of a raid, as it is subject to the tenure of the producer. A variety of factors arising in the normal course of business can also result in the departure of that producer.

In a satellite office, there are typically few producers, and the loss of a few can have a devastating impact on the revenue stream of the satellite office. Furthermore, the raid of an office with few producers can affect the morale of the remaining producers in a way that affects the remaining revenue stream. Consider the example of an office with five producers. If a raid results in the departure of three of the producers, including the satellite office manager, the remaining producers may decide to look for other employment out of concern that the satellite office may close.

Furthermore, in the case where an office is in decline, it is often more difficult to demonstrate that the raided producers would not have left the raided firm in the absence of the raid. Resolving any of these issues in any particular case will require a fact-specific analysis to determine whether the hiring at issue constitutes a raid.

II. Theoretical Principles of Lost Profits Damages in a Raiding Claim

Once a firm's liability for raiding another firm's producers has been established, the question becomes how to fairly compensate the Claimant for the Respondent's wrongful behavior. Regardless of the precise legal context in which the raiding claim arises—breach of contract, tort, or breach of fiduciary duty—the fundamental goal of the lost profits award is to place the Claimant in the same economic position it would have been in but for the Respondent's wrongful conduct.[11] The accepted method of calculating the Claimant's damages in securities

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[10] *Id*. at 9, 11-12, 14-15.

[11] Morley-Murphy Co. v. Zenith Elecs. Corp., 142 F.3d 373, 382 (7th Cir. 1998).

arbitration is a lost profits analysis[12] because the very nature of the harm caused by broker raiding is that the Claimant is deprived of its producers, who represent its core means of generating profit.

A. Damages Consist of Profits Lost Due to the Raid

When a firm has been raided, the relevant measure of damages is lost profits. A raiding claim involves the alleged improper hiring of producers—retail registered representatives, institutional salesmen, or traders. All of these positions generate revenue for a firm. The loss of a producer (or several producers) is therefore expected to result in a loss of revenue. That revenue, minus the avoided cost of generating that revenue, is the Claimant's lost profit attributable to the raid. The goal of damages analysis and expert testimony on the issue of damages is to provide guidance to the arbitrators in determining the amount of profits lost as a direct result of the "stolen" revenue.[13]

B. Avoided Costs Are Subtracted from Lost Revenue

The fundamental principle behind all lost profits calculations is that "lost profits" refers to lost *net* profits. Net profits, in this context, are defined as lost incremental revenue less all of the incremental costs that the raided firm avoided.[14] This principle can be articulated slightly differently, depending on whether the raiding claim is stated in tort or contract. For example:

Where a plaintiff seeks recovery under a theory of tortious interference, net

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[12] *See, e.g.*, *Morley-Murphy*, 142 F.3d at 373 (lost profits on breach of contract claim); DXS, Inc. v. Siemens Med. Sys., Inc., 100 F.3d 462 (6th Cir. 1996) (lost profits analysis for tortious interference claim); Cargill, Inc. v. Boag Cold Storage Warehouse, Inc., 71 F.3d 545 (6th Cir. 1995) (lost profits in negligence action); LaVay Corp. v. Dominion Fed. Sav. & Loan Ass'n, 830 F.2d 522, 529 (4th Cir. 1987) ("Lost profits are, of course, generally available to a plaintiff as damages in the successful prosecution of a claim for a breach of contract or a breach of fiduciary duty"), *cert. denied*, 484 U.S. 1065 (1988); Com-Tel, Inc. v. DuKane Corp., 669 F.2d 404 (6th Cir. 1982) (lost profits in federal antitrust action).

[13] A raid may, of course, generate damages in addition to lost profits. For example, a Claimant may have incurred additional out-of-pocket expenses as a result of a raid, such as the costs of hiring a public relations firm to counter negative publicity, or retention bonuses paid to branch managers or registered representatives. How such costs should be included in the damages analysis is discussed later in this article. This article does not address in detail the recoverability of attorneys' or consultants' fees and other costs associated with the arbitration process, which may be governed by state-specific law.

[14] "Incremental revenue" and "incremental cost" are also commonly referred to as "marginal revenue" and "marginal cost."

profits represent the amount a plaintiff would have received in revenue if the defendant had not interfered with the plaintiff's business expectancy, less the cost of securing that revenue.[15]

For breach of contract, [lost profits] means the contract price less cost of performance, or cost of completion, or, as it is sometimes put, "expenses saved" as a result of a plaintiff's being excused from performance by the other party's breach.[16]

However, the end result is the same, regardless of the underlying cause of action. Calculating the lost profits damages award requires quantification of the revenue that would have been generated by the raided producers, less the expenses of producing that income (e.g., producers' salaries) that the Claimant was able to avoid.

C. Proximate Cause

Furthermore, the Claimant in a raiding case (as in any lost profits case) must prove that the raid was the proximate cause of the alleged damages. In order to avoid over-compensating or under-compensating the Claimant for profits lost as a result of the raid, it is important to separate loss of profits attributable to the raid from alternative reasons for the observed decline (that may be unrelated to the raid). For this reason, it is typically ill-advised to rely solely on branch profitability before and after the raid (which can be affected by general market conditions or the addition or loss of a large client, for example).

Rather, it is the goal of the damages analysis to present evidence regarding the incremental contribution to profit that likely would have been made by the departed producers in the absence of the raid. This requires basing the lost profits calculation directly on the producers' lost production. Such an analysis requires a thorough review of the producers' historical production, an assessment of their expected future production, and a careful analysis of the expenses the Claimant would have incurred in order to obtain that production.

D. Mitigation

The Claimant has a duty to mitigate its damages. Mitigation of raiding lost profits damages involves hiring replacement producers, to the extent suitable replacements can be found, hired, trained, and integrated into the Claimant's work

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[15] *DXS*, 100 F.3d at 473.

[16] ROBERT L. DUNN, RECOVERY OF DAMAGES FOR LOST PROFITS 469 (6th ed. 2005).

force. The available pool of qualified candidates may be small, as, for example, when the raided branch is located in a remote area. Also, senior personnel and top producers are more difficult to replace than junior personnel and newer producers, respectively, because the pool of available talent is smaller.

E. Taxes

A lost profits damages award is taxable to the Claimant as ordinary income and is tax-deductible by the Respondent.[17] The lost profits damages calculation should therefore be performed on a pretax basis. Otherwise, the Claimant would effectively be subjected to double taxation: once in the damage award calculation and then a second time when it has to recognize the damage award in its taxable income.[18]

F. Reasonable Certainty

To recover lost profits damages, damages must be calculated with reasonable certainty to be of guidance to the arbitration panel. The overarching principle that governs damage calculations is that a damages award cannot be the product of speculation but must have a reasonable basis. Thus, lost profits damages do not have to be calculated with absolute mathematical precision but the calculation must have a sound basis.[19] Recovery of lost profits also requires that the Claimant demonstrate that the amount of lost profits was the foreseeable result of the raid.

G. Economically Sound Assumptions

Because the claimed loss represents a projection of what would have been in the absence of the raid, a number of assumptions regarding the but-for world must

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[17] John C. Jarosz, *Considering Taxes in the Computation of Lost Business Profits*, 25 CREIGHTON L. REV. 41 (1991); ROBERT W. WOOD, TAXATION OF DAMAGE AWARDS AND SETTLEMENT PAYMENTS (3d ed. 2005).

[18] Some experts like to perform the lost profits calculation on an after-tax basis, taking into account the Claimant's particular tax situation (for example, it may not currently be a taxpayer due to the availability of tax loss carry forwards), and then "gross up" for the taxability of the damages award at the final step in the damages calculation. *Id*. We do not recommend this approach because it makes the amount of lost profits sensitive to the Claimant's particular tax situation.

[19] Uncertainty concerning the occurrence of damages is fatal to the claim, but uncertainty as to the precise amount of damages is not. A Respondent cannot avoid liability just because the amount of lost profits cannot be computed precisely. *See* Story Parchment Co. v. Paterson Parchment Paper Co., 282 U.S. 555, 562 (1931); Racicky v. Farmland Indus., Inc., 328 F.3d 389, 397 (8th Cir. 2003).

be made. The claimed loss is often highly sensitive to changes in these assumptions. Sometimes, even small changes in the assumptions can result in large changes in the amount of the claimed damage. Therefore, a sound damages analysis requires the application of economic and financial theory to the accounting statement data of the Claimant. Both Claimants and Respondents will likely present evidence as to the reasonableness of the assumptions they make, and it is the responsibility of the arbitration panel to consider this evidence and decide the amount of the award.

III. Measuring Lost Profits

Profit is the excess of revenue less expenses measured over some time period. Lost profits, in the context of a raiding case, represent the incremental profits the broker/dealer could reasonably expect to earn but for the raid. They are the difference between the Claimant's profits but for the raid and the Claimant's actual (reduced) profits as a direct consequence of the raid. Lost profits are measured by calculating the expected future revenue lost as a result of the raid and subtracting the incremental expenses the Claimant would have had to incur in order to generate that revenue stream. The lost profits calculation begins with an examination of the books and records of the relevant business unit. Since a raiding case typically involves a group departure, experts generally base their analysis on the profit and loss statement ("P&L") for the business unit to which the group belonged.[20] The P&L provides useful information regarding the historical revenue and expenses of the Claimant.[21]

To ensure the most accurate calculation of lost profits damages caused by a specific raid, lost profits damages should be calculated by subtracting incremental costs from incremental revenues, rather than making a damage award by subtracting average cost of operations from the average revenue per producer. Also, lost profits should be calculated on an incremental *cash basis,* commonly referred to as lost cash flow.[22] Damages in a broker raiding case should not be based on accounting net

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[20] It is usually appropriate to include in the analysis any satellite offices whose financial results are included in the business unit's P&L.

[21] In a retail raiding case, the group's books and records usually are the P&L for the branch from which the brokers departed. In an institutional raiding case (e.g., a trading desk), the group or department often has its own P&L. For example, suppose the head of a trading desk and several of his traders depart. If the desk has a separate P&L for bonus purposes, that statement would generally suffice for the lost profits damage analysis.

[22] Michael J. Wagner, *How to Measure Damages? Lost Income or Lost Cash Flow*, 169 J. ACCT. 28 (Feb. 1990).

income. Incremental cash flow, rather than accounting net income, provides a sounder basis for damages because cash is what is available to pay expenses, meet the firm's interest and other fixed-payment obligations, and pay dividends to shareholders. Accounting net income, on the other hand, includes non-cash items such as amortization and depreciation of assets, which provide a tax benefit for the firm. These items reduce the amount of reported net income, but do not reduce the amount of cash available to a firm. Furthermore, accounting net income will include allocations of fixed costs, which as explained below, should not be included in measuring incremental lost profits.

Incremental expenses are commonly referred to as variable expenses, because they vary with the amount of revenue. In other words, as revenue increases, variable expenses will increase (and as revenue decreases, variable expenses will decrease). Therefore, as a result of the raid, the Claimant will not only have less revenue, but will also incur fewer expenses. These represent expenses that the Claimant "avoided" following the raid. They should be *deducted* from the estimate of lost revenue. Examples of expenses that may vary with revenue or the number of producers include commissions, training expenses, and membership fees. Examples of expenses that do not typically vary with revenue or the number of producers include occupancy lease payments and expenses associated with maintaining an accounting or legal department.[23]

Although there may be avoided costs associated with a lower revenue stream, there may be additional costs that a raided firm incurs as a direct result of the raid itself. These costs, referred to as "out-of-pocket" expenses, represent the incremental costs that the raided firm incurs to preserve its remaining revenue stream or to rebuild its business. Since these are costs that would not have otherwise been incurred but for the raid, they should be *added* to the estimate of lost revenue. Examples of out-of-pocket expenses are legal expenses incurred to pursue a raiding claim, retention bonuses to retain the existing employees of a raided branch, and headhunter fees incurred to replace the departed brokers. It is also important to note that damages can also be amplified by punitive damages. In general, the two most controversial aspects of the damages calculation are the estimation of lost revenue and the determination of which expenses were avoided and should be subtracted from revenues. Estimating lost revenue is controversial because it involves

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[23] This concept is discussed in more detail later in the article.

projecting the revenues that the raided producers would have generated if they had remained with the Claimant, and therefore is highly sensitive to assumptions regarding the Claimant's client base, producer attrition rate, and general market conditions. Determining which expenses were variable and therefore avoided by the Claimant can be even more complex, because specific expenses may be either variable or fixed depending on the circumstances of a particular raid, and the classification for lost profits purposes may conflict with the P&L classification. The remainder of this Part presents a recommended method for estimating lost revenue, avoided expenses, and out-of-pocket expenses.

A. Estimating Lost Revenue

The definition of revenue is rarely controversial in a raiding case because the branch office manager or the head of the trading desk over the years has usually refined the categories of revenue for which she is responsible and on which her performance bonus is based. However, the *amount* of lost revenue usually is a highly contentious issue. Disagreements regarding the measurement of lost revenue typically stem from (1) the appropriate length of the damage period (i.e., over what period of time should lost revenues be estimated) and (2) the dollar amount of expected revenue that would have been generated by the departed producers in the absence of the raid. Once an amount of lost revenue has been calculated for the relevant time period, that amount should be reduced to account for the Claimant's historical rate of attrition and any mitigation revenue the Claimant received.

1. Length of the Damage Period

We observe damage estimates that are calculated over a fixed number of years with no attempt to relate the length of the damage period to fact patterns that impact the Claimant's actual business loss. The length of the overall damage period should represent the expected length of time it will take for the Claimant to replace its lost revenue stream. This may correspond to the amount of time it takes the Claimant to hire and train replacements for the departed producers (assuming the broker/dealer does not close the branch or desk as a result of the raid). However, even after replacements have been hired and trained, the expected production of the replacement brokers may be less than the expected production of the departed brokers but for the raid for some period of time. A common error in estimating damages associated with raiding claims is to assume that the Claimant has mitigated

its losses after hiring a replacement for each departed broker. Only after the Claimant has found suitable replacements for the departed producers, and the production expected from the replacements is equal to the production expected from the departed brokers, are losses considered fully mitigated.[24] The intensity (or lack thereof) of the Claimant's efforts to replace the raided producers is likely to be debated in the arbitration.[25] Counsel needs to proffer through appropriate fact witnesses the length of time it will take to engineer the replacement of the lost production, whether through trainees or the hiring of experienced producers with their own relationships or books of business. Generally, in large urban areas, the time of replacement is faster than in rural areas (probably years, even if the raided firm has a big wallet). Therefore, the length of the damage period should be consistent with the testimony of the fact witnesses.

2. Dollar Amount of Projected Lost Revenue

The amount of revenue lost cannot be known with certainty. Therefore, the lost revenue due to a raid must be projected. Common techniques for estimating lost revenue utilize the raided producers' historical production prior to the raid, the production of similarly situated producers who remained with the Claimant, or a combination of the two.

a. Historical Approach

One recommended approach is to use the producers' historical production prior to the raid to infer the amount of production lost due to the raid. This technique is known as the historical approach. The historical period considered should be long enough to avoid transitory factors that might have an undue influence but recent enough to be meaningful.

Consider the following example. A securities firm that heavily markets mutual funds to its clients will experience fund redemptions in the normal course of

[24] The Claimant's ability to recover for the costs it incurs in attempting to mitigate its damages is discussed in more detail later in the article.

[25] One special situation deserves comment. If a raid eliminates an entire business, such as an entire sales and trading department, and the raided firm is unable to replace it, then the loss of revenue would not be adjusted for mitigation since the business was destroyed and replacing individual producers would not be feasible. For example, suppose a broker dealer loses its entire convertible bond department to a raider. If, despite its best efforts, it is unable to hire suitable replacement traders and is unable to restart the business, the raided firm lost the entire revenue stream from its convertible bond department.

business. The pre-raid redemption rates within the client accounts of the producers lost due to the raid can be a useful indicator of the expected future redemption rates but for the raid if two conditions are met. The historical rates should exhibit a discernible pattern, and it can be demonstrated through expert testimony that the pattern could reasonably be expected to continue but for the raid. Exhibit 1 illustrates the impact of a raid on the mutual fund redemption pattern. Redemptions accelerate following the raid and then gradually return to normal. In such cases, damages should be based on "excess redemptions," that is, redemptions in excess of the normal pattern.

However, caution must be exercised and proper analysis must be conducted when using historical information to make inferences about the future. A common mistake in projecting revenue in a raiding case involves the failure to adjust historical revenue patterns to match future expectations. For example, if the Claimant's historical growth in production is used to forecast future production, and a significant and unexpected market decline (such as the bursting of the technology stock bubble and resulting stock market decline beginning in March 2000) is included in the historical period, the projected growth rate will understate the rate of growth that would reasonably have been forecast at the date of the raid. Therefore, the effects of market anomalies and other external factors that are not expected to reoccur during the forecast period should be excluded so as not to understate the lost revenues and penalize the Claimant. For the same reason, an unexpected and fortuitous burst of revenue in a single period should not be used to inflate the Claimant's lost revenue either. Careful consideration of (and adjustments for) factors impacting the historical revenue patterns of the Claimant are necessary to produce the most reasonable forecasts of future lost revenue.

b. Benchmark Approach

A second approach is to use the production of similarly situated producers who remained with the Claimant as a benchmark to infer the amount of lost production.[26] This technique is often referred to as the "yardstick approach" or "benchmark approach." The benchmark must be chosen carefully so that the production accurately reflects the expected performance of the producers lost in the

[26] Similarly, comparable branches (or business units) may be used to infer the lost production if an entire branch (or business unit) was raided.

raid had they remained with the Claimant.[27] For example, an appropriate benchmark of but-for, revenue-generating capability of the raided branches may be other non-raided branches the raided firm operates (1) within the same geographical region, such as a single state; (2) within similar demographic areas; and (3) with similar brokerage activities. Other benchmarks may include forecasts for the industry prepared by reputable third parties. For example, Securities Industry Association forecasts or consultants' forecasts for the relevant segment of the brokerage industry may be used for this purpose.[28] However, it is important to demonstrate that the benchmark used is appropriate to the circumstances of the claim. For example, if a raid occurred in a firm's private client group, then the production of a non-raided branch is only meaningful if the non-raided branch is also a private client group. If the non-raided branch includes more than just private client production, then the benchmark becomes less meaningful.

3. Rate of Historical Attrition

Once a reasonable forecast of lost revenue has been prepared, the lost revenue stream should be adjusted for the probability of normal producer attrition. This important adjustment is often overlooked in the estimation of lost profit from a raid. It is important to recognize the possibility that the raided producers might have left the Claimant in the ordinary course of business (such as a change in employer or retirement), causing the Claimant to lose some of the affected revenue stream even if the raid had not occurred. To reflect this possibility, we suggest that the estimated lost revenue should consider the Claimant's historical rate of producer attrition. The rate of attrition reflects the incidence of producer departures that diminish revenue in the ordinary course of business, such as a producer departing to join a competitor in a non-raiding situation. Orderly attrition of producers, such as a scheduled retirement, will normally not lead to a significant loss of business because the retiring producer's book of business transitions within the firm. Therefore, we believe retirements do not need to be included in the estimation of normal attrition.

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[27] Another possible benchmark is the increase in revenue and profits realized by the Respondent following the raid. However, this performance may be a poor benchmark for at least two reasons. First, the two firms may have different product offerings, which can affect relative production levels. Second, it will take time for the producers to transition successfully into the new firm. Using their post-raid production at the Respondent will therefore tend to understate damages to the Claimant.

[28] Forecasts are typically provided by firm size and geographical region, e.g., medium-size Midwestern regional broker/dealer or national broker/dealer.

Exhibit 2 illustrates an analysis of attrition to estimate the impact on the revenue stream of the Claimant.

4. Mitigation Revenue

Furthermore, the Claimant is expected to make a reasonable effort to mitigate its loss. Revenue generated from mitigation efforts, such as hiring replacement producers, will also reduce the amount of claimed lost revenue, since the Claimant would have replaced all or part of the lost revenue stream. However, as previously discussed, the Claimant often retains a damages claim for lost profits even after hiring replacement producers, since the Claimant's new producers may not immediately generate the same level of revenue as the raided producers.

For example, a raid that takes a large number of producers from several offices in a concentrated region could have a damaging effect on the Claimant's reputation, which would make it more difficult to hire replacement producers. Also, even after the replacement producers are hired, there is a transition period while the new producers get integrated into their new firm, move client accounts to the new firm, and build their books of business back to where they were by replacing those accounts that stayed with their former employer.

Thus, the time required to hire replacement producers will depend on the seniority and skill level of the producer and the size of the available pool of talent. Even when replacements can be hired, the length of time required to mitigate fully the damages will depend on the damage done by the raid.

B. Estimating Expenses Avoided

After calculating lost revenue, the Claimant must estimate the incremental expenses that would be incurred to produce that revenue. Identifying incremental expenses is an area of the damages analysis that often becomes especially quarrelsome because it is the area that is the most susceptible not only to genuine disagreement but also to exaggeration.

The guiding principle is that cash expenses that the Claimant is able to avoid as a direct result of the raid should be deducted from lost revenue when calculating the net profits lost due to the raid. Only cash expenses are eligible; overhead allocations and other noncash expenses should be excluded. The difficulty, of course, lies in determining which expenses the Claimant can avoid. There are no bright-line rules for determining which expenses are avoidable, and an expense that should be

deducted in one case may properly be nondeductible in another.

The confusion tends to reside in three areas. First, it is important to understand why all costs are not deducted from profits in a lost profits case, because this is a common source of error in estimating lost profits. Second, useful definitions that enable the parties, their experts, and the arbitrators to distinguish between so-called variable and fixed expenses are critical. Third, it is important to understand how to apply these definitions to specific cost items in the context of a raiding claim. Law and economics help to clear up the confusion concerning which costs should be included in the lost profits damages analysis.

1. Two Different Kinds of Harm

Whatever they are called, the reason that costs that continue despite the Respondent's wrongdoing are *not* deducted in a lost profits damages analysis is that deducting them would undercompensate the Claimant. Indeed, lost profits damages must recognize that the Claimant has suffered two different kinds of harm: (1) lost net profits, as a result of Respondent's wrongdoing, and (2) the lost business that was no longer available to help defray the Claimant's fixed costs of doing business.[29]

In *Kutner Buick, Inc. v. American Motors Corp.*, the Third Circuit explained this concept as follows:

> The effect on net income must be measured by revenue lost less costs avoided. This translates into lost revenue less the variable cost of producing that revenue. Fixed or unavoidable costs are by definition unrelated to the individual income producing activity and thus are not relevant to the change in net profit calculation. Fixed costs remain the same over a relevant range of activity for a given time period, whereas variable costs change in total in relation to changes in total activity. Whether a cost is fixed or variable depends upon and may change with the specific inquiry. For example, if at a business facility, a single activity was being conducted, all costs, whether denominated as fixed or variable for financial reporting purposes, should be taken into account in determining the effect on net profit of the termination of that activity. Under these circumstances, all costs would eventually be

[29] *Morley-Murphy*, 142 F.3d at 373, 382; *see also, e.g.*, Hallmark Ins. Adm'rs, Inc. v. Colonial Penn Life Ins. Co., 990 F.2d 984, 989 (7th Cir. 1993) (stating that the rule that only avoided costs are to be deducted in lost profits damages analysis "is based on the notion that a party harmed by another's breach of contract is entitled to collect those net revenues that would have helped defray fixed costs and contributed to profit").

> variable because at some point after all activity ceases all costs would cease. If at a business facility more than one activity was being conducted, however, in calculating the effect on net profit from terminating one of them, fixed overhead costs would be irrelevant.[30]

The court in *Kutner Buick* went on to illustrate this concept with a hypothetical example:

> Let us assume that Kutner is selling AMC and General Motors products at Bustleton Avenue with these results:

	General Motors	AMC	Total
Revenue	$1,000	$1,000	$2,000
- Variable Costs	-300	-600	-900
Contribution toward Fixed Costs and Net Profit	700	400	1,100
- Fixed Costs	-500	-500	-1,000
Net Profit (Loss)	$200	($100)	$100

> In the illustration, if fixed costs are attributable to the AMC sales, that part of the business appears to be operated at a loss. In reality, however, the termination of the AMC activity would not increase net profits because the $500 in fixed costs attributed to that activity will not be avoided. The effect would be as follows:

	General Motors Alone	
Revenue	$1,000	
- Variable Costs	-300	
Contribution toward Fixed Costs and Net Profit	700	
- Fixed Costs	1,000	(500+500)
Net Profit (Loss)	($300)	

> Terminating the AMC activity in the hypothetical example turns a $100 net profit into a $300 net loss—a $400 adverse effect. As a matter of arithmetic, and thus as a matter of both fact and law, fixed

[30] Kutner Buick, Inc. v. Am. Motors Corp., 868 F.2d 614, 618 (3d Cir. 1989) (internal citations omitted).

> costs are irrelevant to the determination of loss of net profit from the termination of a business activity. The only proper focus is revenue generated less variable costs, which equals contribution to fixed costs and net profit.[31]

Thus, a proper lost profits damages analysis does not include a deduction for costs that are not avoided because of Respondents' wrongdoing. The Claimant would be undercompensated by a damage award from which such costs were deducted because the amount "allocated to fixed costs is also lost by the breach, it is not captured by any other theory of damages, and by definition none of the fixed costs could be avoided because of the breach."[32]

2. Variable Expenses versus Fixed Expenses

To avoid over-compensating a Claimant, certain expenses—generally termed "variable expenses"—must be deducted from revenues in calculating the amount of lost profits. As previously discussed, *variable expenses* are cash expenses that increase (decrease) as the number of producers increases (decreases). By the same token, a lost profits damages analysis should not undercompensate a Claimant. Thus, other costs—typically called "fixed expenses"—should not be deducted from revenue in calculating lost profits. *Fixed expenses* are either non-cash accounting allocations or cash expenses that do not vary as the number of producers changes.

The following excerpts from the case law illustrate the difficulty that judges have in articulating a bright line rule for the foregoing principle:

- "In calculating its but-for condition, a plaintiff must deduct any costs that it avoided as a result of being illegally excluded for [sic] a profitable opportunity. However, it need not deduct all costs incurred in association with that revenue, such as fixed costs."[33]
- "Fixed or unavoidable costs are by definition unrelated to the individual income producing activity and thus are not relevant to the change in net profit calculation."[34]
- "The law in Pennsylvania, as elsewhere, is that lost profit damages are calculated by subtracting from revenue lost as a result of the breach those costs avoided as a result of the same breach . . . . A central element in making

[31] *Id.*; *see also, e.g.*, *Morley-Murphy*, 142 F.3d at 382 (similar tabular examples).
[32] *Morley-Murphy*, 142 F.3d at 382.
[33] *DXS*, 100 F.3d at 474 (internal citations omitted).
[34] *Kutner Buick*, 868 F.2d at 618.

this calculation, therefore, is the ascertainment of which costs vary with output and which do not (i.e., are truly fixed)."[35]

- "Costs that would be incurred anyway should not be subtracted, because by definition they cannot be avoided by curtailing the profit-making activity. This principle is well established in the treatment of overhead costs in calculating damages for breach of contract."[36]

Exhibit 3 provides examples of expenses in a broker raiding case for each category of fixed and variable costs. Specific items that the case law has included in the "fixed" (or unavoidable) costs basket are, for example, "amortization, salary expenses for personnel not involved in [the activity harmed by defendant's wrongdoing], insurance, etc.,"[37] "front office personnel responsible for marine sales and administration,"[38] "rent . . . and basic phone service,"[39] "[w]ages and overhead costs,"[40] and "management salaries, property taxes, and insurance."[41]

3. Analytical Challenges

The application of this principle to specific broker raiding cases during arbitration proceedings is frequently the source of disagreement among the parties and conflicting expert testimony. Disagreement often occurs because there are some costs that should be deducted from revenue in calculating lost profits but others that should not, because characterization of an expense as either "fixed" or "variable" in a lost profits sense often conflicts with its characterization on the Claimant's P&L, and because whether a particular kind of expense is fixed or variable often changes from case to case depending on the details of the raid.

a. Branch vs. Home Office Expenses

It is important to distinguish at the outset between branch costs and home office costs that are clearly identifiable to their respective locations. For example, the salaries of branch staff belong in the branch's P&L, and executive officers' salaries at

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[35] *Hallmark Ins.*, 990 F.2d at 989 (internal citation omitted).

[36] Taylor v. Meirick, 712 F.2d 1112, 1121 (7th Cir. 1983) (discussing calculation of damages for copyright infringement defendant's profit).

[37] N.W. Controls, Inc. v. Outboard Marine Corp., 333 F. Supp. 493, 525 (D. Del. 1971).

[38] *Id*. at n.31.

[39] *Taylor*, 712 F.2d at 1121.

[40] Fen Hin Chon Enters., Ltd. v. Porelon, Inc., 874 F.2d 1107, 1113 (6th Cir. 1989).

[41] Paper Converting Mach. Co. v. Magna-Graphics Corp., 745 F.2d 11, 22 (Fed. Cir. 1984).

the home office belong in the home office's P&L. Attempts to eliminate the former from, or include the latter in, a lost profits damage analysis would be unreasonable. Yet an artful expert, trying to increase or reduce expenses, might treat either expense in a lost profits damages analysis so as to enhance his client's position.

Expenses are also difficult to assign as deductible or nondeductible in situations where constant negotiation between the group leader and the home office regarding expense allocations has taken place. A branch office manager understandably tries to exclude expenses incurred at the home office from the branch P&L—even when they are arguably generated as a result of the branch's production. For example, the home office may send out all the branch's monthly customer statements for cost efficiency and compliance reasons. Since the cost occurs at a location away from the branch, the branch manager cannot control the cost of labor, and she may argue that the cost should not be allocated to her branch. While the internal negotiation will decide how this cost is allocated for purposes of the internal P&L, it does not necessarily resolve the question of how the cost should be treated in a lost profits analysis. In general, the incremental cost of sending out the branch's monthly customer statements for the portion of the branch's production that is lost due to the raid is properly included in the avoided cost calculation.

b. Lost Profits versus P&L Characterization

An expense that varies in amount from one month to the next may nevertheless be "fixed" in the sense that it does not vary with the number of producers. Suppose a branch is assessed a charge by the home office that is calculated as a fixed percentage of its revenue. The charge is deducted on the branch P&L, but the cash flow of the broker-dealer is unaffected. Such noncash intracompany accounting allocations are "variable" in an accounting sense but "fixed" in a lost profits sense.

c. Significant Raids

Some so-called fixed costs may actually decrease if commission revenue decreases sufficiently. For example, normally management costs will remain fixed even though an office has lost some of its producers. However, it is important to consider the possibility that home office costs could decrease if the raid is so significant that it reduces the number of management personnel or support staff

needed to operate the home office.[42]

d. Fully-Raided Offices

The reduction in expenses will be greater when a branch office is *fully raided,* and must close as a result, than when it is only adversely *affected* by the raid and is able to remain open for business. All the costs of operating a fully raided branch are avoided, including those costs that would customarily be considered fixed, such as the branch office manager's compensation. However, in that case, there are out-of-pocket costs associated with closing the branch that must be included in the lost profits damages calculation.[43]

Such difficulties are not confined to broker raiding cases; the courts have wrestled with them in other types of cases. While the courts frequently denominate nondeductible costs in shorthand fashion as "fixed" costs, they have also come up with a variety of formulations of the concept that can provide meaningful guidance for parties, experts, and arbitrators alike. For example, the four excerpts cited above hold that costs that are "avoided" because of the defendant's wrongdoing should be deducted.[44]

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[42] The amount of this reduction should be based on the number of personnel needed to maintain a reasonably efficient level of operations. In other words, the Claimant has a duty to mitigate its damages, which includes eliminating redundant overhead expense resulting from the raid.

[43] Out-of-pocket costs are discussed in greater detail later in the article.

[44] Other decisions also provide helpful guidance. *See, e.g.*, *DXS*, 100 F.3d at 474 (noting "expenses saved because of the wrongful act"); *Hallmark Ins*., 990 F.2d at 989 (discussing costs that "vary with output"); *Fen Hin Chon*, 874 F.2d at 1113 ("Wages and overhead costs *would have remained the same*, . . . so the marginal profit on the lost [revenues] would have been substantially higher than the profit realized on the stamps actually sold.") (emphasis added); *Paper Converting Machine*, 745 F.2d at 22 (stating that in the incremental income approach to lost profits computation, "fixed costs—those costs which do not vary with increases in production, such as management salaries, property taxes, and insurance—are excluded when determining profits"); *N.W. Controls*, 333 F. Supp. at 525 (holding in federal antitrust action that "gross profit figures reflect fixed costs which [plaintiff] incurred regardless of whether it had manufactured and sold the additional cables for which it claims damages. Inclusion of these fixed costs [in the lost profit damages analysis] precludes a proper damage calculation," and also describing "costs [that] would not have materially increased"). In *Com-Tel v. DuKane Corp*., the Sixth Circuit approved the use of the approach outlined in *N.W. Controls*. Com-Tel, Inc. v. DuKane Corp., 669 F.2d 404, 415 (6th Cir. 1982). Such distinctions are useful in looking behind the labels to determine which expenses are truly variable with respect to the number of producers.

C. Out-of-Pocket Costs Incurred

In contrast to the expenses discussed above, which must be subtracted from lost revenues, *out-of-pocket costs* (also called incidental costs) are incremental expenses that the Claimant *incurs* as a direct result of the raid, and which are therefore properly added to the Claimant's damage award. These out-of-pocket costs are of two basic types, the cost of mitigating the Claimant's damages and the cost of pursuing the arbitration claim against the Respondent. Typical categories of out-of-pocket costs include:

- the cost of hiring replacement producers and replacement branch office managers
- any retention bonuses the Claimant must pay, or other retention expenses it incurs, to retain its existing producers and branch office managers whom it believes it is at risk of losing as a direct result of the raid
- any retained asset bonuses it pays to its producers to incent them to retain as much as possible of the assets that were in the client accounts of the departed brokers
- the cost of closing any fully raided branch(es) net of any cash it realizes by disposing of unwanted assets from the branch(es)
- miscellaneous incidental expenses that can be directly traced to the effects of the raid, such as the cost of hiring a public relations firm to counter the negative publicity caused by the raid
- possible consultant fees, expert witness fees, and other arbitration-related expenses
- any pre-award interest to which the Claimant may be entitled (depending on local law and the arbitration panel's discretion).

The Claimant must offset against these expenses any payments that it would have owed the departed producers had they remained in its employ but which it avoided having to pay because of the raid. Care should be taken to avoid double counting those costs that were already taken into account elsewhere in the lost profits calculation.

IV. Present Value Calculation

Because the lost profit analysis represents a forecast of expected revenue *from the date of the raid*, it is our opinion that the stream of annual lost profits must be

discounted to a present value as of the date of the raid. Experts often differ as to the appropriate discount rate. However, the difference of opinion can usually be resolved fairly easily because objective standards are used by most experts in choosing the discount rate. In general, the Claimant's cost of capital should be used to discount the stream of lost profits to a present value. Fortunately, there are well-established techniques for calculating the cost of capital.[45] There are also well-respected sources of information available that use these techniques that therefore can be consulted to obtain a reasonable estimate of the cost of capital in most cases.[46]

The lost profits amount is usually adjusted to the date of trial or arbitration by adding prejudgment interest. Prejudgment interest compensates the Claimant for the time value of money by bringing the damage amount forward in time from the date of harm to the date of trial. The calculation of prejudgment interest varies among legal jurisdictions as a matter of law. State laws and federal law each prescribe the statutory rate of interest that must be used in this calculation.[47]

V. Applying the Basic Principles

As we stated earlier, flawed or biased damage calculations are often responsible for the inconsistent arbitration awards we observe in broker raiding cases. To avoid the common mistakes we describe in this article, a damages calculation should be consistent both with the law and with the basic theoretical principles of economics and finance. This is the challenge for determining lost profits

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[45] There are a number of ways to estimate a discount rate, including calculating a weighted average cost of capital ("WACC") or using the Capital Asset Pricing Model ("CAPM") approach.

[46] A widely consulted source for information on the cost of capital is Ibbotson Associates' *Cost of Capital Yearbook*. *See generally* IBBOTSON ASSOCIATES, COST OF CAPITAL 2004 YEARBOOK (2004), and in particular, the cost of capital estimates for firms in SIC (Standard Industrial Classification) Code 6211 (Security Brokers, Dealers, and Flotation Companies).

[47] As an alternative to calculating the present value as of the date of the raid and adding prejudgment interest, the damages expert could calculate the present value of lost profits as of the date of the arbitration award. Damages occurring between the date of harm and the date of the award would be "present-valued" by compounding the historical lost profits forward to the date of the award using an appropriate Treasury (*i.e.*, risk-free) interest rate (because all business uncertainty with respect to historical periods has been resolved). However, it is more appropriate to calculate damages as of the date of harm. *See* ROBERT L. DUNN, RECOVERY OF DAMAGES FOR LOST PROFITS 545-550 (6th ed. 2005). Moreover, it is usually easier to update the prejudgment interest calculation (by adding an additional period's interest at the statutory rate) than it is to recalculate the present value of lost profits (for the longer historical period and correspondingly shorter future period).

damages. This article provides a solution for this challenge by bringing legal, economics and finance principles together into a cohesive framework for calculating lost profits damages in a raiding case. The following example illustrates the application of our proposed framework and draws from several raiding cases on which the authors have worked in order to provide a richer illustration than any single case alone would permit.

Exhibit 4 provides a Summary of Damages prepared by National Securities Corporation ("National"). National has filed a claim for arbitration with the NASD Dispute Resolution, Inc. ("NASD"), which accuses Regional Securities Corporation ("Regional") of raiding four of its offices in New Jersey at the end of 2000. The offices are located in Asbury Park, Bay Head, Deal, and Spring Lake. The Bay Head branch lost all its brokers and had to be closed. It is therefore classified as a closed (or fully raided) branch. Each of the other three branches lost at least forty percent of its production, but National has kept all three open and has tried to hire replacement producers. They are therefore classified as affected (or raided) branches.

The Summary of Damages presents the amount of damages the Claimant allegedly suffered due to the raid. The present value of lost profits damages is broken down branch by branch. This manner of presentation is appropriate because the arbitration panel will have to determine branch by branch whether a raid occurred and then ascertain the amount of lost profits for those branches that it determines were raided — and only for those producers that it finds were improperly hired away by Regional.

The next Part of the Summary of Damages lists the additional out-of-pocket expenses that National claims it incurred due to the raid. As noted earlier in the article, these additional expenses must be directly attributable to the raid, and the amount of the expenses and their relationship to the alleged raid must be properly documented. Partially offsetting its out-of-pocket expenses, National avoided having to pay the remaining outstanding balances of the hiring bonuses it still owed several of the departing brokers, which amounted to $500,000. (They presumably got bigger bonuses from Regional.)

Exhibit 5 provides the lost profits calculation for the Asbury Park branch, one of the raided branches. Ten years of lost profits are projected, and cumulative totals are provided so that the arbitration panel will be able to find the amount of damages that corresponds to whichever damage period (between one and ten years) it determines is most appropriate given the expected mitigation effort of the

Claimant. Exhibit 5 starts with lost commission revenues and then subtracts the amount of commissions that would be lost through normal attrition.

Exhibit 6 provides details of the lost commission calculation for the years 2001 through 2004 based on the year-to-year revenue changes calculated in Exhibit 7. The revenue changes are calculated for comparable unraided branches. After 2004, lost commissions remain at the 2004 level. Exhibit 2, discussed earlier in the article, furnishes the calculation of the attrition rate (5.36 percent per year).[48] Next, the commissions generated by replacement brokers (net of attrition) are subtracted to obtain net commissions. The actual and projected replacement commissions are calculated in Exhibit 8. Then variable expenses are subtracted.

Examples of variable expenses are provided in Exhibit 3, and are typically based on an analysis of the financial statements of the raided and closed branches. The time period should be long enough to avoid having the estimate of the variable expense ratio depend too heavily on just a year or two. The time period should include the period affected by the raid unless the raid significantly affected the branch's expense ratio. In that case, the pre-raid period or the variable expense ratio for comparable branches should be used. Exhibit 9 uses five years of data for the three raided branches and calculates an overall ratio of variable expenses to total revenue for each branch.

The Bay Head branch, which had to be closed as a result of the raid, must be treated differently from the other three branches. Its lost profits are calculated in Exhibit 10. Note that there are no mitigating commissions in this calculation because the branch ceased operations at the end of 2000. The $30,000 of avoided lease payments, in effect, raises the (adjusted) variable expense ratio to 64.17 percent for 1999 and 66.16 percent for 2000. Also, the variable expense ratio, which is calculated in Exhibit 9, is higher for this branch than for the other three branches because certain expenses, such as office rent, which are normally fixed expenses, become variable expenses when a branch is closed because the Claimant no longer incurs them.

The result of performing the lost profits damages calculation is summarized in Exhibit 4. Total lost profits for the ten-year period are $3,202,008. Total out-of-pocket expenses are $275,000 net of offsets, and prejudgment interest is $1,000,000.

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[48] In the first year, lost commissions are multiplied by one minus the attrition rate of 5.36 percent, or 94.64 percent. In the second year, lost commissions are multiplied by 94.64 percent squared (89.57 percent).

The total claim is $4,477,008.

Exhibit 4 omits two other categories of out-of-pocket expenses that an arbitration panel might award. The panel can award sanctions if it finds that one of the parties engaged in especially objectionable behavior during the arbitration process. It can also award punitive damages against the Respondent if it finds that its conduct during the raid was particularly egregious and harmful to the Claimant. However, it can award such damages only if state law permits punitive damage awards.

Conclusion

This article provides a framework to calculate lost profits damages in a broker raiding case that is consistent both with the law and with the basic theoretical principles of economics and finance. The framework we advocate eliminates the bias often associated with a lost profits calculation. In their deliberation, when disagreements arise over the amount of damage sustained by a claimant, we suggest the arbitrators should identify the source of the disagreement before making a final ruling. For example, is the disagreement over the expected lost revenue? The fixed versus variable cost? The length of the damage period? Once the source (or sources) of disagreement are identified, arbitrators should keep in mind the legal principle that a lost profits damages award should be "reasonably certain." Furthermore, arbitrators should evaluate the damages claims to check that they are consistent with the principles of economics and finance, rather than the product of speculation.

The methodology we describe is grounded on concepts drawn from contract and tort case law, theories established in economics and finance, as well as the authors' experience in securities arbitration. We have applied the teachings of a variety of relevant cases to develop a lost profits damages calculation framework that we believe will be useful to the parties involved in such matters and informative to the arbitrators who are called upon to decide such cases. It is our hope that through the application of the principles described in this article, future damage awards in raiding cases will be based on sound economic methodology and not shrouded in mystery.

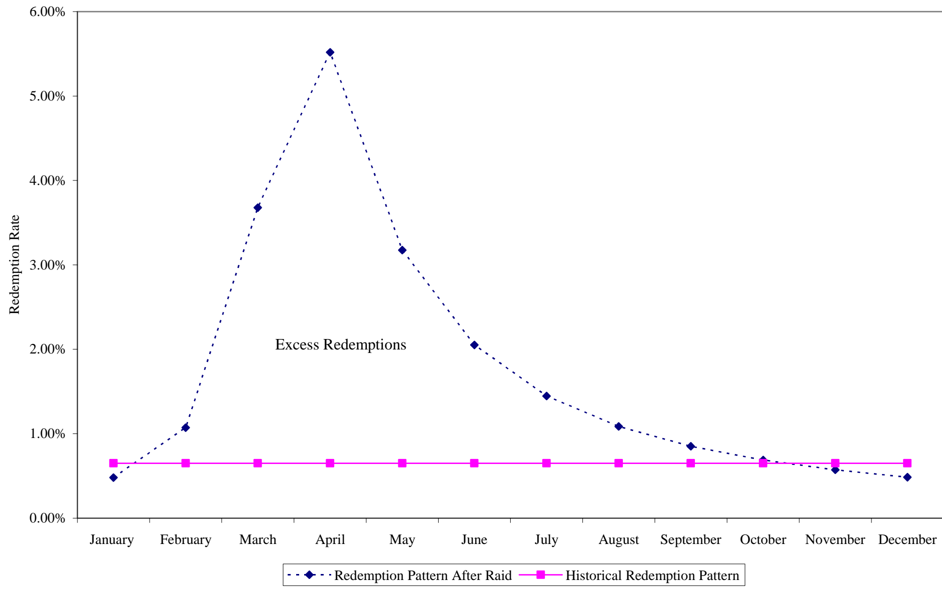
Exhibit 1
Impact of Raid on Mutual Fund Redemption Pattern
Redemption Rate
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
Excess Redemptions
January
February
March
April
May
June
July
August
September
October
November
December
Redemption Pattern After Raid
Historical Redemption Pattern

Exhibit 2
Historical Rate of Producer Attrition

	Branch 1			Branch 2		
	2002	2003	2004	2002	2003	2004
Number of Producers	11	7	8	31	27	23
Left for Other Firms	3	0	0	4	2	0
Retired/Died	1	0	1	1	0	0
Involuntary Termination	0	1	0	0	2	0
Number of Terminations	4	1	1	5	4	0

	Branch 3			Branch 4		
	2002	2003	2004	2002	2003	2004
Number of Producers	16	13	13	10	10	9
Left for Other Firms	1	1	0	0	1	0
Retired/Died	1	0	0	0	0	0
Involuntary Termination	1	0	0	0	1	0
Number of Terminations	3	1	0	0	2	0

	Branch 5			Branch 6		
	2002	2003	2004	2002	2003	2004
Number of Producers	6	6	2	10	10	11
Left for Other Firms	0	0	0	1	0	0
Retired/Died	1	0	0	2	0	0
Involuntary Termination	0	0	0	0	0	0
Number of Terminations	1	0	0	3	0	0

	Branch 7		
	2002	2003	2004
Number of Producers	12	13	13
Left for Other Firms	1	0	0
Retired/Died	1	0	1
Involuntary Termination	0	0	0
Number of Terminations	2	0	1

	Attrition Summary for All Branches		
	2002	2003	2004
Total Producers	96	86	79
Total Terminations	18	8	2
% Attrition (All Terminations)	19%	9%	3%
Total Left For Other Firms	10	4	0
% Attrition (Left for Other Firms)	10%	5%	0%

Exhibit 3

Examples of Fixed vs. Variable Expenses

Variable Costs	
Sales Commissions	Medical Leave Claims
Grid Reduction	Oth Assoc Ben/Spec Apr
Incremental Payout	CRP Bnft Allc-PST/ESOP
Sales Guarantees	CRP Bnft Allc-401(K)
Sales Draws	Prior Yr Adj PST/ESOP
FA Salary	Prior Yr Adj 401K
Asset Retention Bonus	Toll Charges
Trainee Guarantees	Optimzd Long Dist/Wats
Train New Acc/Asst Fee	Cell, MBL, Pag Offsite
Comm-FICA Taxes	Calling Cards
Comm-Fed Unemployment	Fax Services
Comm-State Unemployment	Printing-Outside
BNS Amort-Signing	Print Shop Chgbk
BNS Amort-Production	General Office Supplies
BNS Amort-Signing Stk	Express Mail
BNS Amort-Pres Stk	Postage-Regular Mail
Prod BNS-No Note	Postage-Chgbk
Def Comp-Exp Fas	Computer Software Main
Comm CPR Ben-PST/ESOP	Cmptr Supplies
Comm CRP Ben-401K	Sales Training

Fixed Costs	
Mgr/Admin Guarantees	Depr-Office Mach&Eqp
Temporary Services	Depr-Furn&Fixtures
Employment Advertising	Depr-Computers
Tuition Reimbursement	Office Equip-Non Cap
Local Service	Furn Equip-Non Cap
Answering Service	Tele Equip-Non Cap
Shared Lines	Leased Edp Equipment
Data Lines	PC Equip-Non Cap
Market Data Circuits	PC Hardware Chargeback
Tele Install/Relocate	Eqp/Furn Rntl-Non-Edp
Tele Main	Repairs & Maint-Equip
Print Shop Paper Supplies	Office Relocation
Janitorial Supplies	Corp Occ/Equip Ins
Copier Services	Tangible Property Tax
PC Maintenance	Advertising
Peripheral Maintenance	Prospecting Lists/Lead
Cmptr Sftwr-Non Cap	Advertising/Mkgt Chgbk
Market Info Services	Promotional Supl/Gifts
Market Info Equipment	Company Store Expense
Connect-All Chgbk	Int-CIP Accounts

Prior Yr Adj PST/ESOP	CE Reg Element Training
Prior Yr Adj 401K	Registrtns - FA
Branch Mgr Override	Registrtns - Insurance
Mgr Variable Salary	Airfare
Admin FICA	Lodging
Admin Fed Unemploy	Ground Transportation
Admin State Unemploy	Misc Other Travel
Group Insurance Exp	Meals&Entertainment
Group Insurance Chrgbk	Dues and Memberships
Workers Comp Ins	Error Account
Other Admin Insurance	Brnch Mgr Incntv Comp
Employment Fees	Gen'l Corp Incntv Comp
Associate Development	

Facts Charges	Conference Attendance
Sftwr Conslt Srv-Outsd	Registrtns-Firm/Branch
Reg T Extension Fees	Retail Research
Exchange Clearing Chrg	Subscr & Periodicals
Fees Paid Exch on Comm	Other State Taxes
Safekeeping Fees	Occupation Licenses
Stock Transfer Fees	Legal
Rent	Legal Chargebacks
Utilities	Bad Debt-Legal & Compl
Bldg Svc Contracts	Regulatory Fees
Electrical-Labor	Non-Regulatory Fees
Electrical-Materials	Bank Service Charges
Oth Rep&Maint-BLD	Automobile Expense
Depr-Lease Hold Improv	Miscellaneous Other

Exhibit 4

National Securities Corporation v. Regional Securities Corporation

Summary of Damages

Present Value [as of the date of the raid] of Pre-Tax Lost Profit	
Asbury Park [1]	$1,711,588
Bay Head	$659,056
Deal	$111,112
Spring Lake	$720,252
Total Lost Profits	$3,202,008
Out-of-Pocket Expenses	
Hiring Bonuses Recaptured	($500,000)
Bay Head Branch Shut Down Cost	$250,000
Amount Paid to Public Relations Firms	$125,000
Bonus Payments to Branch Managers of Raided Branches	$400,000
Total Out-Of-Pocket Expenses	$275,000
Prejudgment Interest	$1,000,000
Total Claim	$4,477,008

Notes:

[1] See Exhibit 5.

Exhibit 5

Present Value of Pre-Tax Lost Profits at Asbury Park Branch (Raided Branch)

		2001	2002	2003	2004	2005
[1]	Lost Commission Revenues	$1,042,638	$1,036,926	$1,101,813	$1,227,933	$1,227,933
[2]	Net of Allowance for Normal Attrition	1,042,638	1,036,926	1,101,813	1,227,933	1,227,933
[3]	Actual/Estimated Mitigating Commissions Generated	1,372	46,005	350,976	445,701	572,913
[4]	Net of Allowance for Normal Attrition	1,372	46,005	350,976	445,701	572,913
	Net Commissions	1,041,266	990,921	750,837	782,232	655,020
[5]	Variable Expenses	645,638	614,421	465,557	485,023	406,146
	Total Pre-Tax Lost Profits	$395,628	$376,500	$285,280	$297,208	$248,874
[6]	Discount Factor at 11.1%	0.9493	0.8549	0.7695	0.6926	0.6234
	Present Value of Branch Pre-Tax Lost Profits	**$375,561**	**$321,880**	**$219,526**	**$205,856**	**$155,156**
	Cumulative	$375,561	$697,442	$916,968	$1,122,824	$1,277,980
		2006	**2007**	**2008**	**2009**	**2010**
[1]	Lost Commission Revenues	$1,227,933	$1,227,933	$1,227,933	$1,227,933	$1,227,933
[2]	Net of Allowance for Normal Attrition	1,227,933	1,227,933	1,227,933	1,227,933	1,227,933
[3]	Actual/Estimated Mitigating Commissions Generated	613,487	740,699	781,272	781,272	781,272
[4]	Net of Allowance for Normal Attrition	613,487	740,699	781,272	781,272	781,272
	Net Commissions	614,446	487,234	446,661	446,661	446,661
[5]	Variable Expenses	380,988	302,110	276,952	276,952	276,952
	Total Pre-Tax Lost Profits	$233,458	$185,124	$169,708	$169,708	$169,708
[6]	Discount Factor at 11.1%	0.5611	0.5051	0.4546	0.4092	0.3683
	Present Value of Branch Pre-Tax Lost Profits	**$131,004**	**$93,502**	**$77,152**	**$69,444**	**$62,506**
	Cumulative	$1,408,983	$1,502,486	$1,579,638	$1,649,082	$1,711,588

Notes:

[1] See Exhibit 6.

[2] See Exhibit 2.

[3] See Exhibit 8.

[4] See Exhibit 2.

[5] See Exhibit 9.

[6] Source: Ibbotson Associates, *Cost of Capital Yearbook*, 2004

Exhibit 6

Actual and Projected Commissions of Departed Brokers, 1997-2004

	Commissions Generated			
Broker	1997	1998	1999	2000
Broker A	$592,185	$655,715	$475,687	$532,810
Broker B	$575,394	$419,397	$354,227	$432,985
Broker C	$218,184	$254,786	$217,933	$214,943
Commissions Generated from Departed Brokers	$1,385,763	$1,329,898	$1,047,847	$1,180,738
Rate of Change in Commission Growth				
	Lost Commissions Generated by Raided Brokers [1]			
Broker				
	2001	2002	2003	2004
Broker A				
Broker B	$470,492	$467,914	$497,195	$554,107
Broker C	$382,343	$380,248	$404,043	$450,292
	$189,803	$188,763	$200,575	$223,534
Commissions Generated from Departed Brokers	$1,042,638	$1,036,926	$1,101,813	$1,227,933
Rate of Change in Commission Growth	-11.70%	-0.55%	6.26%	11.45%

Note:
[1] Based on the year to year revenue change per broker in comparable branches.
See Exhibit 7.

Exhibit 7

Year-to-Year Revenue Change Per Financial Associate for Comparable Branches

2000 - 2004

	2000		2001		2002	
	Total Commissions	No. of FAs	Total Commissions	No. of FAs	Total Commissions	No. of FAs
Branch A	$2,778,039	11	$1,860,619	7	$1,660,405	8
Branch B	$10,117,358	31	$7,123,123	27	$6,518,345	23
Branch C	$3,920,987	16	$3,266,542	13	$2,539,755	13
Branch D	$3,903,382	10	$3,362,003	10	$3,421,244	9
Branch E	$1,732,521	6	$1,337,184	6	$1,309,373	2
Branch F	$2,989,420	10	$2,460,474	10	$2,351,672	11
Branch G	$2,972,426	12	$3,067,236	13	$2,733,717	13
TOTAL	$28,414,133	96	$22,477,181	86	$20,534,511	79
Revenue per FA	$295,981		$261,363		$259,931	
Percent Change in Revenue per FA			-11.70%		-0.55%	

	2003		2004	
	Total Commissions	No. of FAs	Total Commissions	No. of FAs
Branch A	$2,209,568	8	$2,462,489	8
Branch B	$6,628,704	24	$8,003,089	26
Branch C	$3,590,548	13	$4,309,355	14
Branch D	$2,761,960	10	$3,078,111	10
Branch E	$828,588	3	$923,433	3
Branch F	$3,038,156	11	$3,385,922	11
Branch G	$3,590,548	13	$4,001,544	13
TOTAL	$22,648,073	82	$26,163,944	85
Revenue per FA	$276,196		$307,811	
Percent Change in Revenue per FA	6.26%		11.45%	

Exhibit 8

Actual and Projected Replacement Commissions

	Actual Replacement Broker Commissions			
	2001	2002	2003	2004
Broker A	$0	$0	$138,038	$187,197
Broker B	$0	$0	$116,386	$148,374
Broker C	$1,372	$46,005	$96,552	$110,130
Broker D				
Broker E				
Total	$1,372	$46,005	$350,976	$445,701

	Projected Replacement Broker Commissions					
	2005	2006	2007	2008	2009	2010
Broker A	$187,197	$187,197	$187,197	$187,197	$187,197	$187,197
Broker B	$148,374	$148,374	$148,374	$148,374	$148,374	$148,374
Broker C	$110,130	$110,130	$110,130	$110,130	$110,130	$110,130
Broker D	$127,212	$167,786	$167,786	$167,786	$167,786	$167,786
Broker E			$127,212	$167,786	$167,786	$167,786
Total	$572,913	$613,487	$740,699	$781,272	$781,272	$781,272

Exhibit 9

Variable Expenses as a Percentage of Revenue for Raided and Closed Branches

	Year Ending Dec-99	Year Ending Dec-00	Year Ending Dec-01	Year Ending Dec-02	Year Ending Dec-03	Year Ending Dec-04	Total
Asbury Park (Raided)							
Total Revenue	N/A	$4,350,263	$4,017,250	$1,030,608	$1,205,329	$1,748,428	$12,351,878
Variable Expenses	N/A	$2,589,553	$2,343,165	$677,396	$828,519	$1,220,158	$7,658,791
% of Total Revenue	N/A	59.53%	58.33%	65.73%	68.74%	69.79%	62.01%
Deal (Raided)							
Total Revenue	N/A	$5,359,057	$5,211,856	$2,723,371	$2,000,736	$2,327,597	$17,622,617
Variable Expenses	N/A	$3,396,755	$3,162,513	$1,525,621	$1,468,696	$1,589,415	$11,142,999
% of Total Revenue	N/A	63.38%	60.68%	56.02%	73.41%	68.29%	63.23%
Spring Lake (Raided)							
Total Revenue	N/A	$7,926,009	$8,312,909	$5,433,514	$5,196,776	$5,511,448	$32,380,656
Variable Expenses	N/A	$4,921,815	$5,012,027	$3,414,597	$3,293,382	$3,412,510	$20,054,331
% of Total Revenue	N/A	62.10%	60.29%	62.84%	63.37%	61.92%	61.93%
Bay Head (Closed at end of 2000)							
Total Revenue	$4,588,162	$4,255,902	N/A	N/A	N/A	N/A	$8,844,064
Variable Expenses	$2,914,081	$2,785,754	N/A	N/A	N/A	N/A	$5,699,835
Percent of Total Revenue	63.51%	65.46%	N/A	N/A	N/A	N/A	64.45%
	$2,944,081	$2,815,754					
	64.17%	66.16%					

Exhibit 10

Present Value of Pre-Tax Lost Profits at Bay Head Branch (Closed Branch)

		2001	2002	2003	2004	2005	Terminal Value as of December 31, 2005
[1]	Lost Commission Revenues	$500,000	$450,000	$400,000	$375,000	$330,000	
[2]	Net of Allowance for Normal Attrition	$500,000	$450,000	$400,000	$375,000	$330,000	
[3]	Variable Expenses (64.45% of Revenue)	322,241	290,017	257,793	241,681	212,679	
	Avoided Lease Payment	30,000	30,000	30,000	30,000	30,000	
	Total Pre-Tax Lost Profits	$147,759	$129,983	$112,207	$103,319	$87,321	$349,285
[4]	Discount Factor at 11.1%	0.9487	0.8539	0.7686	0.6918	0.6227	0.5605
	Present Value of Branch Pre-Tax Lost Profits	$140,184	$110,998	$86,246	$71,480	$54,376	$195,773
	Cumulative Present Value of Pre-Tax Lost Profits	$140,184	$251,182	$337,428	$408,907	$463,283	$659,056

Notes:

[1] The branch had to be closed at the end of 2000 as a result of the raid.

[2] See Exhibit 2.

[3] See Exhibit 9.

[4] Source: Ibbotson Associates, *Cost of Capital Yearbook*, 2004