

**The Calculation of Damages
in Securities Arbitration**

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The Calculation of Damages in Securities Arbitration

INTRODUCTION

This article is a presentation of the methodology by which damages are calculated and *mis*-calculated in securities arbitration. It's an exposition of the rules, theories, tools and techniques we use in calculating and testifying about damages in securities disputes.

We have joined forces to extend our discussion on damages and, as a step toward the goal of establishing standards for the calculation of damages in securities arbitration, to present the similarities and differences in our viewpoints. Because our work is ultimately based on guidance from case law, our similarities far outweigh our differences. Where we differ, we'll tell you how and why.

Our preparation has been many years of number-crunching: the myriad calculations we have performed in the course of analyzing literally thousands of accounts with

regard to the calculation of damages.

Before we present the results of our calculations at hearing, our work is scrutinized not only by the attorneys on our side of the case, but by opposing counsel as well. Invariably, our expert peer on the other side of the table has thoroughly reviewed our analysis for fallacies, inconsistencies, improper assumptions, and mathematical error.

In cross-examination, all real and imagined deficiencies in our work are revealed, blown up, and tacked to the wall.

In spite of these challenges, we love to calculate damages when we're on the claimant's side and to challenge damages on defense. It's the most intellectually challenging part of our analytical work.

In this article, we'll first present damages calculations from the claimant's perspective, then suggest avenues for attack from the defense perspective.

PHILOSOPHY

Some attorneys know before they retain us which damages theories and defenses they wish to pursue; others appreciate our suggestions. In either case, new ideas for presentation of damages in exhibits may arise as facts are developed and documents examined during discovery. At hearing, our preference is to present the panel with alternative choices, the underlying law for which will be argued by counsel.

OUT-OF-POCKET GAIN OR LOSS

Out-of-pocket gain or loss is the difference between all that the investor contributed to the investment or account and all that the investor received from the investment or account. This can also be described as Net Out-of-Pocket (“NOP”) or “OOPG/OOPL.”.

The Concept of “Actual Damages” in Securities Arbitration

In securities fraud cases and class actions, out-of-pocket loss is usually defined as the difference between what the investor paid for the investment and the investment’s true value (absent the fraud) at the time of the purchase. For example, assume that an investor paid \$10 for a stock. Absent the fraud, the stock could have been purchased for \$5. Using this definition, the investor has a \$5 loss.

Because this measure of damages does not measure a “gross economic loss” *per se* and requires expert analysis and testimony to establish the true value of the investment, it is actually more akin to a market adjusted remedy.

As we discuss below, this measure of “NOP” is not the commonly accepted remedy in customer-broker arbitration. However, it is useful for practitioners to be aware of the semantic differences when arguments are made as to whether both out-of-pocket losses and market-adjusted losses constitute “actual damages.”

Calculation of NOP on an Individual Security

For an individual security, the out-of-pocket gain or loss is the amount paid minus dividends received, less the sale price or current valuation of the security.

In some cases, it is appropriate to calculate the interest used to carry the security on margin. However, in an account with numerous securities that are constantly changing, it is a herculean task to break down a debit balance and related interest charges in a security- specific manner. Because of this complexity, this calculation is rarely seen.

Calculation of NOP on an Account

There are two ways to calculate out-of-pocket gain or loss for a brokerage account.

The Reconciliation Rule

The only way to know whether your profit-and-loss calculation is correct is to perform the calculation using both formulas shown below and make sure that you arrive at the same number each time.

This is the basic mantra of all damages calculations. When we are asked to review calculations performed by another expert, this is where we begin. When there are errors in the other expert's work, we generally find them by applying these simple reconciliation formulas:

The “Money In/Money Out” formula:

Beginning equity

Plus cash deposits and transfers in

Minus cash withdrawals and transfers out

Plus securities received in

Minus securities delivered out

Minus ending equity

Equals out-of-pocket (gain) or loss.

The Money In/Money Out method arrives at a positive number for a loss; the Trading Activity

<p style="text-align: center;"><u>The “Trading Activity” formula</u></p> <p style="text-align: center;"><i>Realized trading gains (losses)</i> <i>Plus unrealized trading gains (losses)</i> <i>Plus dividends and interest</i> <i>Minus margin interest and fees</i></p> <p style="text-align: center;"><i>Equals out-of-pocket gain or (loss).</i></p>

formula arrives at a negative number for a loss. When you add the results together, the sum will be the dollar amount of your discrepancy, or error.

Another way of looking at these calculations is that the line items (in italics, above) represent everything that can possibly happen in a brokerage account. When added up, they must equal zero. They will if the calculation has been done correctly. If they don't equal zero, there is an error in the calculation.

Likewise, if the expert performs his or her work by preparing a chronological summary of all activity in the account (for example, purchases, dividends, deposits, etc.), then the sum of all of these entries must equal zero.

Received and Delivered Securities

One question that frequently arises is how received and delivered securities are to be valued. There are several ways to determine the valuation price:

- (1) Use the closing or average price of the

security on the date of transfer. This is the most accurate and, therefore, desirable method; however, the expense of retrieving the information may be prohibitive.

Historical prices may be determined from several sources; It is essential that prices used are *unadjusted* for subsequent stock splits. We use the following sources:

- Yahoo! Finance - adjusted or unadjusted for splits; free
- America Online - adjusted; free
- Dow Jones Interactive - adjusted or unadjusted; very usable presentation with alternative formats; fee charged. This site contains extensive information on corporate and government bonds, foreign securities and unit trusts.

Most business libraries contain historical price records, including back issues of the Wall Street Journal, The New York Times and Barrons. These periodicals can be helpful for pricing the most common corporate bonds and option contracts as well as common stocks. Daily newspapers are particularly useful

for the pricing of securities that have matured or otherwise vanished due to bankruptcy, reorganization or acquisition.

Historical pricing for options presents more of a challenge. The CBOE will provide small amounts of historical information at no charge. In addition, the CBOE website (www.cboe.com) lists outside vendors that sell historical pricing information.

- (2) Use the valuation price from the closest available monthly account statement. In many cases, and for most preliminary analyses, these prices are close enough to provide a reasonable approximation of the price; however, for low-priced or volatile securities, there can be significant differences in security prices over a period of a week or two.
- (3) If the security is received and sold shortly thereafter, use the sale price. If the received security is irrelevant to the analysis, this has the additional advantage of “zeroing” the gain or loss on that security.

If the security is delivered out and sold at another brokerage firm shortly thereafter, use the actual sale price. Because arbitrators will differ in

the degree to which they accept this practice, which is discussed at greater length below, we strongly advise that experts itemize the two components separately so that arbitrators can exclude the follow-on gain or loss if they choose.

Depending on the facts of the case and the realities of such pressures as time and cost, any of these methods, or even a combination of methods, can be acceptable. It is essential in every case to footnote how valuations of securities received and delivered have been determined.

Errors in the Calculation of NOP

Unfortunately, keystroke errors occur during data entry. Often, account statements retrieved from microfiche are illegible. Since some mistakes are inherent in the process, it is critical that we employ mechanisms that find and fix the problems.

We catch mistakes as we go along by performing the above, basic reconciliation formula each month. As we complete the data entry for each month, we make sure that there are no discrepancies before we proceed.

When asked to evaluate another expert's damages calculations, we frequently find that the reason their numbers fail to reconcile is because they have double-counted the dividends. In other words, they incorrectly treat dividends and interest as "money in." To the inexperienced analyst, dividends seem as though they are "money in." After all, they come from the outside world. Analytically, however, dividends are generated from within the account: they are conceptually the same as capital gain on a security: they are

generated by the security, within the account. For this reason, they are treated separately in the Trading Activity formula, but not in the Money In/Money Out Formula.

Calculating “Money In/Money Out” NOP

When performing a preliminary evaluation of an account, we may calculate gain or loss by using only half of the reconciliation formula. In order to save time and money, we may not enter and match all of the security transactions. In other words, we may do only a Money In/Money Out calculation. This method is often used when trying to make a simple assessment for counsel as to whether or not to proceed with a case or to get a rough idea of what the damages might look like.

The monthly statements provided by the firms have improved greatly. Most firms have some or all of the components of the Money In/Money Out calculation listed on the first page. Some even “mark-to-the-market” the value of securities received or delivered.

In performing this type of calculation it is easy to miss a cash or security deposit or withdrawal. There are two ways to verify the accuracy of the data.

First, we can reconcile the cash in the account to the penny every month. *Beginning cash balance, minus purchases, plus sales, plus dividends, minus margin interest and fees, plus cash in, minus cash out, must equal the ending cash balance.*

If possible, we use a “checker,” another pair of eyes, to walk through the account statements and look for missed entries of securities in and out. By definition, if we have reconciled the cash, we have made no errors in cash in and

out.

MARKET-ADJUSTED DAMAGES

Market-adjusted damage calculations adjust the gain or loss in the account to a market-based equivalent. They demonstrate what the account would have earned or lost had it been invested in some other investment surrogate.

The case-law basis for market-adjusted damages is that they provide an automatic adjustment for any market-based activity, such as “crashes,” or upward spikes that are not caused by the respondent’s wrongdoing. The computation allows the trier of fact to fashion a remedy within the context of the investment marketplace. Market-adjusted damages avoid what is sometimes called in the case law “unjust compensation” received by the investor, who presumably assumed the general risk of investing in the market, but not the specific risk of investing in unsuitable securities or investing on margin.

In a falling market, market-adjusted damages reduce the loss caused by unsuitable or otherwise improper activity. In a rising market, market-adjusted damages compensate the investor for lost total return caused by a breach.

The calculations go by many names. Among them are “Miley” damages, after one of the seminal damages cases (*Miley v. Oppenheimer & Co.*, 637 F.2d 318, 326 (5th Cir.), *reh’g denied*, 642 F.2d 1210 (5th Cir. 1981), “well-managed account” damages, “properly-managed account” damages, “benefit of the bargain” damages, and “lost profits” damages.

We tend to use the term market-adjusted damages under a properly-managed account theory. We rarely use “well-managed,” since it is not necessary that an account be *well*-managed. It is necessary that an account be *suitably*, or

properly managed. In other words, had an account been invested suitably and properly in accordance with the investor's financial profile, understanding, and investment objectives, it would have performed differently than it actually did.

In most cases, the claimant's damage calculation indicates that, had the account been *suitably*, or properly managed, there would have been no out-of-pocket loss. Instead, the account would have generated a positive total return. Here, the claimant seeks as damages the out-of-pocket loss plus a market-adjusted damage component.

There are instances when, even if the account had been suitably maintained, the account would have suffered a loss. It is possible that this measurement of damages could provide a remedy smaller than the out-of-pocket loss. Ironically, respondents sometimes discount the validity of this theory. The proof of its merit is that, if done properly, it does not discriminate between profits or losses.

When the claimant has an out-of-pocket gain, the market-adjusted remedy may be significant if the claimant's portfolio significantly under-performed one composed of suitable securities, or one that was not excessively traded.

Primary questions that a market-adjusted damages calculation must address are:

- 1) What is/are the appropriate investment alternative(s) to use in the calculation? and
- 2) How is the calculation performed?

There are many alternative investment choices. Our approach is to present a "Model Portfolio" to the panel,

representing a portfolio allocated to the investor's specific investment objectives.

Presenting a Model Portfolio

The first step in presenting a Model Portfolio is to select the appropriate alternatives to present to the panel.

Unadjusted Portfolio

The simplest form of unadjusted portfolio calculation is made when an investor deposits a large amount of a single security as collateral in a margin account. Later, the security is sold pursuant to margin calls, and the claimant requests restoration of the position or monetary damages.

The calculation is relatively straightforward. It requires a calculation of the current value of the shares, adjusted for splits and dividends. Other losses occurring in the account may be sought as damages, including margin interest.

More complex unadjusted portfolio damage calculations can be used when, for example, the claimant deposits to the account a portfolio of blue-chip stocks and investment-grade bonds. The broker recommends selling the portfolio and recommends a high level of trading in heavily margined speculative securities.

While simple in theory, the calculations for unadjusted portfolios can be extraordinarily complex. Usually, 90% of the calculations are simple: find the current price of the security, adjust for splits, and add dividends. The other 10% can take many hours of research due to mergers,

spinoffs, liquidations, and/or name changes. Moreover, using this approach assumes that all securities received in by the broker would have been maintained throughout the life of the account. For all of these reasons, we often recommend the use of a market index or equivalent as a proxy for a properly-managed account in this scenario.

Market Indices

Market indices such as the S&P 500 Composite Index, S&P Utility Index, Lehman Brothers Corporate or Government Bond Index, the NASDAQ Composite, and the Dow Jones Industrial Average are frequently used to adjust for market performance.

There is explicit support for the use of such indices in the case law. In *Miley* the plaintiff's damages were reduced "by the average percentage decline in value of the Dow Jones Industrials or the Standard and Poor's Index during the relevant period of time." Likewise, *Rolf v. Blyth Eastman Dillon*, 570 F.2d 38 (2nd Cir., 1978) ("Rolf II") reduced damages by "the average percentage decline in value of the Dow Jones Industrials, the Standard & Poor's Index, or any well-recognized index of value, or combination of indices, of the national securities markets..."

While the courts have generally accepted this approach, there are some inherent problems. The use of an index ignores the typical costs incurred when investing with a full service broker, though this adjustment can be factored in. Few investors walk in to see a broker and ask to invest in an index; few brokers recommend index funds; and even fewer brokers make recommendations that over time perform as well as or better than an index. Respondent's counsel may argue that the use of an index is speculative since the investor's account was unlikely to be so invested or to

perform that well even if suitably maintained.

While use of an index mutual fund as an alternative to the use of an index avoids some of the problems, we all prefer the use of non-index mutual funds as portfolio alternatives, except in instances where an index is a more appropriate investment proxy than a fund.

Mutual Funds

The use of mutual fund averages is an ideal way to provide a “real-world” model portfolio for the investor whose funds should have been *suitably*, or properly managed.

Software that performs these portfolio calculations for thousands of funds in the mutual fund universe is available from Thomson Financial/CDA Wiesenberger and Morningstar, Inc.

For model portfolio damages, Ross and Norm are dedicated users of Thomson Financial/CDA Wiesenberger software. The data is updated monthly and can be accessed by CD-ROM or downloaded directly from the company’s web site. The software encompasses historical data for more than 10,000 open end funds, closed end funds, and variable annuities. It includes templates that allow for empirical modeling.

Mary uses Morningstar Principia Pro Plus for Mutual Funds™, which is available on monthly CD-ROM for \$895 per year (\$595 if updated quarterly). She integrates the data in her market-adjusted model, and utilizes the software directly to make market-adjusted return calculations for specific funds. The software also makes simple total return charts of mutual funds and market indices. Information about the software is available at www.morningstar.com.

One extremely effective method of presentation utilizes respondent brokerage firm's in-house funds as a surrogate for market-adjusted performance. If the firm does not have in-house funds, Ross will frequently use the list (often provided on the brokerage firm's website) of fund families with whom the firm has sales agreements, then use the Thomson Financial software to calculate portfolio results using flagship funds in those families.

Mary uses the Morningstar software to calculate the performance of the average fund in, for example, the universe of mutual funds with a "Growth," "Growth and Income," or "Aggressive Growth" objective. In testimony, she presents it as the equivalent of what an investor could realistically have expected to earn in mutual funds with certain objectives. Ross agrees that this is an equally valid approach and has adopted this method in some case-specific instances. By using an average fund rate of return for a particular investment objective, we avoid accusations that the surrogates have been "cherry-picked" to enhance damages.

We all have developed software models that perform our market-adjusted damages calculations using massive amounts of index and investment alternative data gathered from many sources.

Mary sometimes uses the Morningstar software for individual funds directly without integrating it into her model, since the software provides the flexibility to "deposit" or "withdraw" cash from the portfolio provided individual funds rather than fund averages are used. In using the software for individual funds, she will usually pick the fund at the 50th percentile of all funds with a given objective; in other words, the average performing fund. The calculation can be fine-tuned to select only funds that have been in

existence for 10 years, for example, or to limit it to front-end load funds or funds available at a particular brokerage firm.

Ross uses all of the funds that fit the customer's investment objectives from the chosen fund family or families that were in existence for the life of the accounts at issue. The results can be averaged or looked at individually, giving the panel a degree of flexibility if they choose to apply this remedy. Thomson Financial also has the capability of making time weighted deposits and withdrawals.

Other Investment Alternatives

Often, investors should have some percentage of their funds invested in alternatives such as money-market funds or CD's. Where appropriate, we include these calculations in the alternatives presented to the panel.

Calculating Market-Adjusted Total Return

In the two seminal market-adjusted damages cases, Miley (1981) and Rolf (1978), the market-adjusted damages calculation is very simple: the out-of-pocket loss is reduced by the percentage decline of a market index during the period. The fact that these cases arose from the declining market of the 1970's makes them particularly relevant today.

It's helpful to remember that these calculations were made long before the PC era; the simplicity of the calculation reflected the tools available at the time. However, the simplicity of the *Miley/Rolf* calculation is offset by its deficiency: because it is neither time-weighted nor dollar-weighted, it may under-compensate some investors and over-compensate others. Significantly, it also ignores the effect of dividends and interest where non-total-return indices are

used.

An archeological fact known to most damages experts is that there is an error in the *Miley* calculation as stated in the opinion: it double-counts the dividends. Like most experts, we ignore the error and perform the calculation correctly.

Spreadsheets, databases, and the widespread availability of index-based data make far more sophisticated, accurate calculations possible. We all utilize these tools to simulate the performance of an account utilizing different investment alternatives. It is easy for us to use models to time-weight and dollar-weight performance, add dividends and interest, and to do so for literally thousands of investment alternatives.

Mary's model is based on an integrated QuattroPro platform; Norm and Ross use Microsoft Excel. As noted above, each of the models is integrated with our respective mutual fund data base software.

Although the models have the ability to perform some calculations on a daily basis, we usually simplify the calculations to use monthly compounding. There are two reasons for this adjustment: first, it eliminates the storage of massive amounts of daily index and total return data. Second, since our account calculations are done on a monthly basis, it permits easy integration between our basic P&L spreadsheets and our market-adjusted damages models.

The basic calculation is to take the starting equity, add to it any funds or securities deposited that month, subtract all funds or securities withdrawn that month, and then adjust the equity for the actual percentage gain or loss in the index or equivalent during that month. Since some indices do not provide total return, an additional step may be

required to add the average dividend return for that index for the month in question.

The result of the calculation becomes the hypothetical ending equity. This calculation is repeated every month.

At the end of the period, the model's calculation of beginning equity, plus money and securities in, minus money and securities out, minus ending equity must equal the out-of-pocket gain or loss in the account. The hypothetical ending equity, minus the out-of-pocket loss in the account, equals the market-adjusted component of damages. Where the account showed a gain, the hypothetical ending equity is equal to the market-adjusted component, since the gain in the account has by definition already been removed from the calculation.

Selecting a Model Portfolio

We typically present the panel with a range of investment alternatives or equivalents, then select a "Model Portfolio" representing an appropriate allocation given the client's individual suitability profile. The calculation using this model portfolio is carried forward to the claimant's request for damages.

For example, calculations for an investor who wished to invest for growth (but not speculation) might utilize the average growth-objective mutual fund.

An investor with more balanced objectives might invest 50% in the average growth-objective mutual fund plus 50% in the Lehman Brothers Corporate Bond Index.

Occasionally, the portfolio that an investor forms with the help of an investment advisor, subsequent to the period in question, may determine an appropriate portfolio allocation.

Often, Mary presents the panel with a 10% rate of return calculation. This way, if the panel chooses to calculate a 6% return, for example, they can approximate the correct figure as 60% of the 10% calculation. We present the panel with a simple rate of return using the statutory interest rate of the state whose law counsel argues is applicable.

In choosing an appropriate model portfolio for a specific investor, we draw on our investment experience and knowledge, but defer to the panel to select an appropriate model portfolio for the claimant. Should the panel wish to choose a different model portfolio, we make it easy for them to do an alternative calculation.

The Market-Adjusted Damages Period

One frequently-asked question is whether the calculation of market-adjusted damages should extend through the date of the hearing, or end as of the date that the brokerage account was closed.

There is a strong argument to be made for extending the computation through the date of the hearing: had there been no misconduct, the account would still be open and generating total return at the equivalent rate of the model portfolio. Our experience, however, is that most arbitrators feel that it is appropriate to end the calculation as of the date of closing the account. Typically, we will end the calculation as of the closing of the account, calculating pre-judgment interest from that date to the date of the hearing. Sometimes we present the calculations to the panel both ways.

Specific Damages for Unsuitable Securities

Generally a market-adjusted damages calculation for a “suitably maintained account” will look at the whole account.

However, in cases where specific securities are at issue, we use the equivalent of the state’s statutory interest rate to calculate a market adjustment. In effect, this provides rescissionary damages as an alternative for the panel.

We agree that, where specific positions were deposited and for some reason were held inviolate (in other words, beyond respondent’s control), those specific securities should be excluded from damages.

RESCISSION

In general, rescission and rescissionary damages are governed by state law. For example, Florida’s §517.211 statute is known to every expert who performs damages calculations. We recommend consulting with counsel to determine the precise statutory specifications. There are significant differences both in the general formulas and in the statutory rate of interest to be applied.

Most calculations for rescission are relatively straightforward: apply a statutory rate of interest to the purchase price of the security, and subtract any distributions or sales proceeds received. If the security is still held, it is to be transferred to the brokerage firm. The primary advantage of the calculation for the claimant is that it places the burden of current valuation of illiquid securities upon the respondent.

For a defrauded seller, the concept is similar: restore the security to the claimant, or pay monetary damages to

restore the financial position occupied before the transaction, less any sale proceeds received.

BENEFIT OF THE BARGAIN

Market-adjusted damages are a type of benefit of the bargain damages. The “bargain” is the explicit or implicit representation by the broker and brokerage firm that the account will be properly managed.

In this section, we are using the term with reference to different types of contracts or “bargains.”

Explicit Contract

Occasionally, there is an explicit contract between the registered representative and the investor. Such a contract may be improper in that it may constitute a violation of the prohibition against reimbursing a customer for losses. It does, however, suggest a damage alternative to be presented to the panel.

The calculation is straightforward. For example, the rep has stated or written that he will guarantee a profit on the transaction. If an explicit amount is stated, that becomes the amount requested as damages.

Failure to Execute a Buy or Sell Order

Here, the claimant requests lost profits for a buy order that was never placed in a security that dramatically increased in value. Usually, there is little question about the price at which the security “should have” been purchased;

however, there can be considerable disagreement about the valuation price to fix for the calculation of damages.

If the panel determines that the claimant's intent was to hold the security, then restoration of the securities may be the appropriate remedy. If the security would have been traded, the panel must determine at what time and price it would have been sold.

Unless there is some fact that guides the calculation (for example, the claimant establishes that he would have held the security until it doubled), we recommend presenting the panel with a range of dates and prices related to the facts and/or to a "reasonable time and price" for sale.

The rationale is very similar for failure to sell. The key is the panel's determination of the time and price at which the securities should have been sold. Again, we recommend presenting the panel with alternative dates and damages representing different fact-based "reasonable" periods of time.

Misrepresentation of Account Value

From time to time, cases arise in which extremely unsophisticated investors are told that the total portfolio value on their statement is the value of their account. In other words, they are instructed to look at the total securities owned, including the margin debt, rather than at the account equity. Often, the total portfolio value of the account grows, through increasing use of margin, while the account equity actually declines.

Of course, the burden is on the claimant to establish the fact that the misrepresentation was made, and that they relied on it. We would typically prepare an exhibit for the

panel requesting restoration of the account value to the level misrepresented, plus interest.

THE “NEW YORK RULE”

The “New York Rule” provides a damage remedy for cases when a security of fluctuating value is converted, not delivered or otherwise improperly manipulated. The most common applicable breach is unauthorized trading. The United States Supreme Court set the basic standard for this remedy over 100 years ago in *Galigher v. Jones*, 129 U.S. 193 (1889).

The remedy provides the injured party the greater of the value of the security at the time of the conversion, or the highest intermediate value from the time the party was notified of the breach and a reasonable time thereafter.

The determination of “reasonable” period of time is left to the trier of fact. The injured party is allowed time to seek counsel, to make an investment evaluation as to whether to exit or re-enter the market, and to raise funds if the investor decides to repurchase. The sophistication of the injured party is considered as well. The harmed investor cannot sit idly and watch the market. He must act to mitigate his damages.

The “New York Rule” shifts the burden of market risk to the wrongdoer, so long as the harmed party acts to mitigate. The harmed party is not required to re-enter the market, but is required to make a determination as to when he would have done so.

CHURNING DAMAGES

Churning damages are more complex than they may first seem. The traditional remedy for churning, based in case law, is the award of excess transaction costs as damages. This is sometimes caused the “quasi-contractual” remedy.

This discussion is not meant to exclude the calculation of market-adjusted damages in churning cases. In cases which are a hybrid of suitability and churning claims, arbitrators may find some mixture of remedies appropriate. Additionally, we discuss below the award of transaction costs as disgorgement in situations where they are clearly double-counted. For the purpose of discussion in this section, we will concentrate solely on damages based on transaction costs.

The complexity arises because “transaction costs” themselves are quite complex. Are we talking about agency commissions, sales credits, spreads, markups, margin expense, or all of the above? Moreover, commissions wear two hats for damages purposes: on one hand, they represent a cost to the customer of trading in the account, which may have meaning for restitution purposes; on the other hand, they represent the “profit” to the registered representative and/or the brokerage firm, which may have meaning for disgorgement purposes.

Transaction Costs as Restitution in Churning Cases

A “pure” churning case occurs when an account has been excessively traded (and controlled by the broker) in otherwise suitable securities. The damage to the customer is the cost of trading. Therefore, the traditional award of transaction costs to the customer according to case law is correct. It is a restitutionary remedy, not a disgorgement

remedy.

The award of margin interest may also be appropriate in a churning case. However, for simplicity, we will limit our discussion to other forms of transaction costs.

The complexity comes when we try to determine the cost of trading the securities. If all of the securities are traded on an agency basis, the cost of trading is simply the agency commissions.

With public offerings purchased on a net basis, in most cases the compensation to the broker and the brokerage firm is paid by the issuer. However, this non-recoverable cost does ultimately come out of the customer's pocket.

With other securities actively traded on a net basis, for example, bonds traded on a principal basis or stock transactions for which the brokerage firm is market-maker, the customer actually pays the *spread* on the security. A *markup/markdown* paid on a transaction can be greater than, less than, or equal to the spread.

The spread paid by the customer is paid once. The spread that the customer pays is the difference between the bid and the offer at the time the customer buys the security. At some firms, there is a practice of writing the bid and offered price on the order ticket at the time of order entry. Historical data concerning the bid and offer is available online at www.nasdaqtrader.com.

Transaction Costs as Disgorgement in Churning Cases

The identification of transaction costs is much simpler for a disgorgement remedy. The amount to be disgorged is that received by the wrongdoer. As with restitution, Agency commissions are easy to identify and calculate.

The amount of potential disgorgement attributable to a registered rep is the rep's net production credit. The firm's component is all revenue received by the firm but not paid to the rep.

Calculation of "Excess" Commissions

One question that arises in both restitutionary and disgorgement calculations is whether to request all commissions or only "excess" commissions. Clearly, case law indicates that "excess" commissions are appropriate. However, this refinement is often omitted for simplicity. Some argue that an acceptable level of turnover is near zero and no subtraction should be made, in effect stating that all commission were "excessive."

In a disgorgement calculation, since the concept is that only "ill-gotten gains" should be disgorged, it may be appropriate to subtract a level of "acceptable" commissions.

Where it is desirable to calculate the "acceptable" level of commissions, subtracting 1% a year is a relatively easy calculation and approximates the expenses the investor would pay in an account with occasional turnover or in a mutual fund.

OTHER DAMAGES CALCULATIONS

Commissions as Disgorgement in Non-Churning Cases

There is support in the case law (most clearly in *Davis v. Merrill Lynch*, 906 F.2d 1206 (8th Cir. 1990)) for double-counting of commissions and margin interest. Claimants can request out-of-pocket and/or market-adjusted damages plus commissions and margin interest as a disgorgement measure, even though they are built into the calculation of out-of-pocket gain or loss in the account.

Where this is done, we feel strongly that the expert should testify on direct examination that the numbers are double-counted, and that counsel should provide the legal argument for doing so as a disgorgement measure.

Gains and Losses Occurring After the Period in Question

How should subsequent gains and/or losses be handled for securities that have been delivered out of the respondent brokerage firm? Norm, Mary, and Ross differ somewhat in this area.

Ross and Norm feel that what happens after an account closes is not material to what occurred during the period giving rise to the dispute. When liquid securities are involved, they are marked-to-the-market at the time of the account transfer. Gains that occur after transfer do not offset damages just as losses that may continue to mount should not be charged as damages to respondent.

Mary's approach for both claimants and respondents is to calculate these gains or losses separately and present them to the arbitration panel. Testimony may be introduced that provides the panel with facts to consider in whether to award these follow-on losses to the claimant. The panel may consider facts such as how long it took for the investor to sell the securities at the successor firm, the sophistication of the investor, whether the securities were fairly valued on the

account statements at the time they left the sending firm, or whether continuing representations by the respondents affected the claimant's decision not to sell the shares immediately.

For example, if the claimant's securities gain in value after the period in question, Mary calculates an offset for the gain so that the panel can make a decision as to whether to include or disregard the calculation.

We agree that our primary role is to calculate the numbers and present them to the panel. It is counsel's role to evoke the necessary facts in testimony and provide argument for the panel's consideration in determining whether to include post-account losses in damages.

Other Disgorgement Remedies

Many of the "boiler room" cases are now behind us. However, variations of the "chop shop" manipulative schemes usually seen in these cases will occur from time to time. Where the claimant is able to prove that respondents engaged in market manipulative activity, it is often appropriate to request disgorgement of the actual trading gains received by individual respondents from trading in their own accounts. This is limited to gains from the same securities as those for which claimant suffered trading losses.

Pre-Judgment Interest

This straightforward calculation is usually based in state law. Statutes typically call for simple (rather than compounded) interest. Our practice is to ask counsel to specify the statutory rate of interest to apply. Generally, we run the calculation through the anticipated date of completion

of the hearing.

DEFENDING AGAINST CLAIMANTS' DAMAGES CALCULATIONS

Mathematical and Typographical Errors

As defense experts, we analyze the claimant's profit and loss report and damage analysis for mathematical errors.

First, we utilize the Reconciliation Rule discussed above to make sure that the numbers balance. If the calculations can't be reconciled, we look for the source of the error. The most likely culprits are double-counting dividends, omitting cash in/cash out entries, and typographical errors.

Once we've found the source of reconcilable errors, we look for errors in non-reconciled entries: for example, account equity. If unpriced securities are in the account, we want to know how they're handled.

We check the identification of securities in the claimant's expert's exhibits. Many analysts truncate security names in order to squeeze them into a spreadsheet, thereby losing critical identifiers of preferred versus common stock, convertible versus straight debt, Class A versus Class B mutual funds, CMO's versus plain FNMA's, and so forth. We've seen examples where corporate bonds look like common stocks, because none of the bond identification information is presented.

Since a major source of differences between the profit and loss analysis of opposing experts is the handling of securities received or delivered, we look carefully for errors in valuation of these securities.

Improper Assumptions

In scrutinizing a claimant's profit-and-loss analysis, one of the first steps is to identify assumptions that underlie the claimant's calculations.

For example, in a scenario whereby the claimant's \$100,000 investment grows to \$400,000, then falls to \$200,000 (assuming no deposits or withdrawals), the claimant may request "out-of-pocket" losses of \$200,000. Absent some fact-based, specific reason why damages should be calculated from the peak of the account (for example, at that point the claimant told the broker that he wanted to get off margin and take no more risk in order to preserve the value of the portfolio), most arbitrators will agree that there was actually an out-of-pocket gain in the account of \$100,000, rather than a \$200,000 loss.

Whether to include gains and losses on received and delivered securities is often an issue. In a situation where the received securities caused the losses, the respondent may argue that the securities purchased at the firm were profitable and request that the panel not hold them responsible, particularly if the securities were never sold and no additional purchases took place in the account.

Respondents may also challenge claimant's assumptions regarding gains and losses that occurred after securities were delivered from the brokerage firm.

Market-Adjusted Damages

First, we look for errors in the calculation itself. Sometimes errors result from the use of false index values.

Since we virtually never have access to the claimant's spreadsheets or data base, our approach is usually to perform the calculations ourselves to see whether we find significant differences.

The correct way to calculate the market-adjusted portion of damages is to calculate the value of the hypothetical portfolio, then subtract the out-of-pocket loss (which is by definition equal to the total net contributions to the account). Another way of looking at the calculation is that the total loss (out-of-pocket portion plus market-adjusted portion) is equal to the difference between the hypothetical ending portfolio and the actual ending portfolio.

One common error occurs when the analyst calculates the value of a hypothetical portfolio, then subtracts the value of the actual portfolio that was already taken out of an account when it was closed. In other words, they overstate the calculation by the amount of the almost-ending equity.

Another common error occurs when there is an out-of-pocket gain in the account. In this case, the gain has already been received, and the claimant's market-adjusted loss is equal to the hypothetical ending portfolio. Any other calculation may end up double-counting some portion of the loss.

The most common errors in presenting market-adjusted damages come from assumptions with no factual foundation. For example, a claimant who asserts that she has absolutely no tolerance whatsoever for risk of any kind requests damages based upon the S&P 500 Composite Index. Invariably, the S&P significantly out-performed not only CD's, but also government and investment-grade bonds during the period in question. In this case, our approach on defense would be to re-calculate the claimant's market-adjusted damages using a more appropriate mix of indices

and equivalents.

Of course, it is the claimant's burden to prove damages. The respondent does have the freedom to simply rip the claimant's work product to shreds and provide no alternative. However, in a case where the claimant looks likely to prevail on liability, it is dangerous to not have specific alternative calculations available to rebut the claimant's expert analysis.

Both *Miley* and *Rolf* provide authority for subtracting market-adjusted damages from the claimant's recovery in declining markets. Although it has been many years since most of us have seen declining markets for broad-based indices over more than a year or so, today we are seeing declining markets in industry sectors and, in short periods, in market indices. Accordingly, we should be on the watch for situations in which declining markets or sectors may be used to reduce a claimant's market-adjusted damages calculation.

Last year, Ross predicted that if the market ever declines and stays down for a significant period of time, the respondent's bar would embrace the market adjusted theory just as the claimant's bar has done in good markets. The market is down, and the respondent's bar is embracing the market-adjusted damages concept. The same rules hold. While a market-adjusted remedy will reduce damages below the net out-of-pocket loss in a down market, care must be taken to use appropriate surrogates that accurately reflect the objectives of the claimant.

Affirmative Defenses

Typically, we are able to calculate significant offsets to the claimant's damage calculation using respondent's arguments relating to statute of limitations and mitigation.

When the defense asserts that damages related to certain securities are time-barred, we will re-calculate all of the claimant's work, both on an out-of-pocket and a market-adjusted basis, to exclude the securities in question.

When mitigation is an issue, we perform the calculations as to the claimant's damages, if any, had the claimant mitigated his damages by selling the securities within a reasonable period of time. The "reasonable period" may be clearly defined by the facts, or fairly ambiguous. In the latter case, we typically present a range of dates and prices for the panel's selection.

The Defense Damages Matrix

The result of our work on "damage defense" is usually a series of exhibits resulting in a matrix representing the available corrections, adjustments, and defenses. We do not recommend leaving it to the trier of fact to sort through all of the numbers: we like to make it simple.

Following is an example of a simple matrix reflecting adjustments for claimant's inappropriate market-adjusted damages portfolio (choice of the S&P 500 index for a claimant whose alleged sole investment objective was safety of principal) and statute of limitations defense.

The Defense Damages Matrix

	Claimant's Out-of-Pocket Loss	Claimant's Market- Adjusted Loss	Claimant's Total Damages
Claimant's requested damages	\$100,000	\$90,000	\$190,000
Claimant's request if market-adjusted damages are based on CD's rather than the S&P 500	\$100,000	\$20,000	\$120,000
Claimant's request if the RobbinsDotCom shares are excluded pursuant to the statute of limitations (using S&P 500)	\$60,000	\$54,000	\$114,000
Claimant's damages if market-adjusted damages are based on CD's rather than the S&P 500 AND the RobbinsDotCom shares are excluded pursuant to the statute of limitations	\$60,000	\$12,000	\$72,000

The temptation to make things complicated is always present. We find that it is best to keep the number of alternatives to a reasonable number. This is particularly true where a range of dates for a mitigation defense is presented. When in doubt, try to simplify.

CLOSING THOUGHTS

_____ Case law is clear that damages should never be “wholly speculative.” This is balanced by the oft-repeated dictum that, where there is uncertainty in determining damages, that uncertainty should be resolved against the wrongdoer.

The “speculative” language can be traced back to two antique cases concerning sale of shares in a silver mine (*Smith v. Bolles*, 132 U.S. 125, 10 S.Ct.39 (1889)) and fraudulent representation of the value of a gold mine (*Sigafus v. Porter*, 179 U.S. 116, 21 S.Ct. 34 (1900)). In other words, there is room for great flexibility in the fashioning of damages without resorting to the specter of speculation.

Our experience is that arbitration panels are receptive to the idea of reasonable, non-speculative damages that are correctly calculated. They are likely to respond favorably to attempts by either side to be fair in their damage requests. Arguments that are well-grounded in fact as well as law are likely to be well-received by arbitration panels.

As experts, our role is to assist the trier of fact. We can best assist arbitration panels by working with counsel to ensure that our exhibits and testimony on damages --whether for claimant or respondent -- help the panel to arrive at the point of equilibrium of accuracy and fairness.

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