Best Practices

Forensic Analysis of Intangible Asset Damages

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Intangible assets are often the subject of breach of contract disputes and tort disputes. In such claims, the intangible asset owner/operator typically attempts to prove that it suffered economic damages due to the defendant's wrongful actions. This discussion summarizes the generally accepted approaches, methods, and procedures related to the measurement of intangible asset economic damages.

Introduction

There are several differences between an intangible asset valuation and an intangible asset economic damages analysis. The forensic analyst who performs a damages analysis should understand these differences. The forensic analyst should understand which of these two different analyses the client (or the legal counsel) is requesting.

It is up to the client, and not the forensic analyst, to determine the scope of the intangible asset analysis. However, in forensic situations, the owner/operator (or the legal counsel) may ask the analyst to perform a valuation when he or she should ask the analyst to perform a damages analysis.

In these instances, the forensic analyst should be able to explain the differences between a valuation analysis and a damages analysis. Informed by that explanation, the owner/operator (or the legal counsel) can decide which type of analysis they want.

In this discussion, let's assume that the owner/operator is the claimant (i.e., the damaged party) in an intangible-asset-related dispute. That dispute could involve either a breach of contract or a tort; these terms are defined below.

In either case, the claimant's intangible asset is damaged due to the alleged misconduct of another party. That other party (i.e., the party causing the damage) becomes the respondent in the dispute.

Let's assume that the claimant (or, more likely, the claimant's legal counsel) retains the forensic analyst to quantify the amount of damages to the claimant's intangible asset. In the typical dispute, the respondent (or, more likely, the respondent's legal counsel) will also retain a forensic analyst to quantify the amount of damages (if any) to the claimant's intangible asset.

This general discussion considers (1) the intangible asset damages analysis purpose and objective, (2) the various dates that are important to the damages analysis, (3) the specific damages analysis terminology, (4) the common types of damages measurements, (5) the common economic damages procedures, and (6) several reasons why an intangible asset value is typically not equal to an intangible asset damages calculation. To illustrate these points, we include simple examples that may not be applicable to any set of specific facts and circumstances.

Differences from Intangible Asset Valuation

The owner/operator may ask the valuation analyst to estimate a defined value for the intangible asset as of either a historical, current, or future date. The owner/operator often needs such an intangible asset value conclusion for various transaction, accounting, taxation, and planning purposes. The value conclusion indicates the estimated price that the indicated buyer would pay to the indicated seller for the subject intangible asset on an indicated date.

Such a value conclusion typically implies a transaction price, even when the current owner/operator is the indicated buyer, the indicated seller, or both (e.g., in the case of owner value—the value of the intangible asset to the current owner/operator).

The owner/operator may request that the analyst estimate a defined value for an intangible asset for various controversy purposes. For example, in bankruptcy, taxation, family law, or shareholder disputes, the controversy often involves an intangible asset defined value.

In accounting fraud and misrepresentation disputes, allegations are sometimes made that the value of the intangible asset was misstated on the owner/operator financial statements. Also, in condemnation and eminent domain disputes, the intangible asset value is often a subject of the controversy.

For example, these are instances when the claimant owned an intangible asset (e.g., an FCC license, an FERC permit, a hospital CON, an oil drilling right) and a government agency revoked that intangible asset for the public good. In such cases, the intangible asset is not damaged. It is simply taken from the claimant by a government authority.

There may be forensic reasons why the analyst is asked to conclude an intangible asset defined value as of a specific date. However, this discussion relates to instances where the claimant's intangible asset is damaged due to the wrongful action of the respondent party.

As mentioned above, these wrongful actions typically fall into one of two categories. The wrongful actions are typically one of the following:

1. A breach of a contract between the parties
2. A tort committed by the respondent against the claimant

Exhibit 1 presents a nonexhaustive list of common intangible asset agreements that are subject to breach of contract claims. Exhibit 2 presents a noncomprehensive list of torts that may be committed against an intangible asset owner/operator.

Exhibit 1
Intangible Asset Forensic Analysis
Common Types of Intangible Asset Agreements Subject to a Breach of Contract

- Inbound/outbound use license agreement
- Customer/purchase agreement
- Supplier/vendor agreement
- Technology/other sharing agreement
- Joint venture agreement
- Joint development agreement
- Joint commercialization agreement
- Distribution agreement
- Production agreement
- Employment agreement
- Noncompete/nonsolicitation agreement
- Nondisclosure agreement
- Extraction license
- Lease
- Franchise
- Servicing contract
- Operating license or permit

Exhibit 2
Intangible Asset Forensic Analysis
Common Types of Intangible Asset Tort Claims

- Infringement
- Expropriation
- Condemnation
- Misappropriation
- Fraud and misrepresentation
- Interference with business opportunity
- Defamation
- Wrongful termination (license, lease, franchise, employment)
- Dissipation of assets
- Breach of officers/directors duty

Intangible Asset Damages Analysis Objective

The typical intangible asset damages analysis objective is to measure the amount of damages suffered by the owner/operator due to effects of the respondent's wrongful actions. Since the intangible asset will often retain some value after the damages event, the damages analysis objective is not the same as a valuation objective.

Another typical intangible asset damages analysis objective is to estimate the amount of a judicial award that will make the owner/operator whole after experiencing the damages event.

That is, the damages analysis concludes the forensic analyst's recommendation to the finder of fact as to the amount of monetary compensation that will restore the owner/operator to its financial position before the impact of the respondent's wrongful actions.

The damages analysis objective typically includes the following components:

1. A definition of the damaged intangible asset
2. A description of the intangible asset ownership interest that was damaged
3. A summary description of the alleged damages event
4. A summary of the type of damages suffered by the owner/operator
5. A description of the alleged damages period (or the important damages dates)

The first objective component is a description and definition of the damaged intangible assets that are subject to a damages event. There is no single comprehensive list of all intangible assets that are subject to either a contract breach or a tort.

However, the forensic analyst may refer to the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 805-20 for a list of identifiable intangible assets that are recognized for various financial accounting purposes. Exhibit 3 presents that ASC 805-20 list of intangible assets.

Alternatively, the forensic analyst may refer to Internal Revenue Code Section 197 for a similar (but slightly different list of intangible assets amortizable that are recognized for various income tax accounting purposes. Exhibit 4 presents that Section 197 intangible asset list.

The second objective component is a description and definition of the intangible asset ownership interest (or bundle of legal rights) that was damaged. There is no single exhaustive list of such intangible asset ownership interests.

Exhibit 5 presents a list of many ownership interests that are commonly considered in an intangible asset damage analysis.

The Damages Period and Damages Dates

An intangible asset valuation is typically estimated as of a single identified date (or, perhaps, as of two or three discrete dates). In contrast, an intangible asset damages analysis often encompasses an extended damages period. This is because the claimant usually experiences the impact of the respondent's wrongful action over a period of time.

The Figure 1 timeline illustrates the damages period that the forensic analyst will typically consider in the intangible asset damages analysis:

First, this timeline illustrates the claimant using the intangible asset before the damages event occurs.

Second, the respondent allegedly commits the first wrongful action and the claimant is affected. This wrongful action could be a breach of contract, an infringement, a breach of a duty, or some other type of tort. The first time that this wrongful action occurs, and the claimant begins to suffer, is usually referred to as the damages event. In many cases, the respondent's alleged misconduct occurs for more than one day and can occur before the claimant is affected.

Let's consider the common example of a trademark infringement dispute. In our example, the respondent may infringe on the claimant's trademark for the first time on June 1, 2012. However, that infringement may continue for months or even years after June 1, 2012.

Third, once he or she learns about the damages event, the claimant is responsible for mitigating the damages caused by the respondent's actions. The above timeline indicates the date when the claimant first started the mitigation process.

However, like the damages event actions, the mitigation actions may continue for months or even years. For example, let's assume the claimant first learned of the respondent's trademark infringement on August 1, 2012.

Figure 1
Typical Damages Timeline

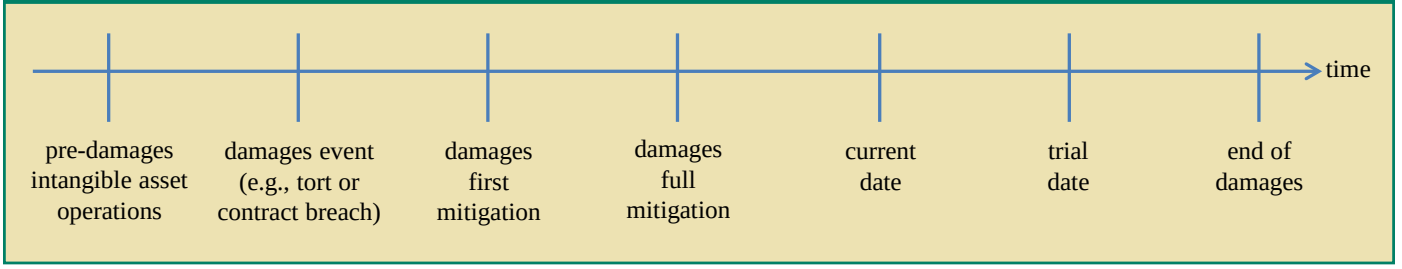


Exhibit 3
FASB ASC 805-20
List of Identifiable Intangible Assets

- Marketing-related intangible assets
  - trademarks, trade names
  - service marks, collective marks, certification marks
  - trade dress (unique color, shape, or package design)
  - newspaper mastheads
  - Internet domain names
  - noncompetition agreements
- Customer-related intangible assets
  - customer lists
  - order of production backlogs
  - customer contracts and related customer relationships
  - noncontractual customer relationships
- Artistic-related intangible assets (copyrights)
  - plays, operas, ballets
  - books, magazines, newspapers, other literary works
  - musical works such as compositions, song lyrics, advertising jingles
  - pictures, photographs
  - video and audiovisual materials, including motion pictures, music videos, television programs
- Contract-based intangible assets
  - licensing, royalty, standstill agreements
  - advertising, construction, management, service or supply contracts
  - lease agreements
  - construction permits
  - franchise agreements
  - operating and broadcast rights
  - use rights such as drilling, water, air, mineral, timber cutting, and route authorities
  - servicing contracts such as mortgage servicing contracts
  - employment contracts
- Technology-based intangible assets
  - patented technology
  - computer software and mask works
  - unpatented technology
  - databases, including title plants
  - trade secrets, such as secret formulas, processes, recipes

Exhibit 4
Internal Revenue Code Section 197
List of Amortizable Intangible Assets

- Goodwill
- Going concern value
- Any of the following items:
  - workforce in place
  - business books and records, operating systems, or any other information base
  - any patent, copyright, formula, process, design, pattern, know-how, format, or other similar item
  - any customer-based intangible
  - any supplier-based intangible, and any other similar items
- Any license, permit, or other right granted by a governmental unit or agency or instrumentality thereof
- Any covenant not to compete entered into in connection with an acquisition of a trade or business
- Any franchise, trademark, or trade name

Identical lists of intangible assets are also provided in the regulations related to Internal Revenue Code Sections 482 and 936.

Exhibit 5
Intangible Asset Forensic Analysis
Alternative Bundles of Intangible Asset Legal Rights

- Fee simple interest
- Term interest
- Life interest
- Residual/reversionary interest
- Licensor or franchisor interest
- Licensee or franchisee interest
- Sub-license or sub-franchisee rights
- Development rights
- Exploitation rights
- Commercialization rights
- Use rights—territorial/geographic
- Use rights—product/industry rights

Let's also assume the claimant's counsel contacts the respondent and demands that it ceases the infringement actions. For purposes of the damages mitigation, let's assume that the claimant contacted its customers about the infringing trademark, implemented corrective advertising to avoid market confusion, or performed some other corrective action. Those activities would represent the first mitigation.

Fourth, it may take some time for the claimant to implement all possible infringement mitigation actions. For example, the claimant may have to communicate with its sales representatives, with its distribution channels, with retailers, and so forth.

The claimant may have to develop an entire advertising and promotion campaign to counteract the impact of the trademark infringement. The full mitigation date relates to the time when the claimant has mitigated the respondent's wrongful actions as much as possible. This date does not imply that the wrongful actions are fully mitigated.

Often, the wrongful actions cannot be fully mitigated. Rather, this date implies that the claimant is now doing everything it can do to minimize the amount of intangible asset damages that it is suffering.

In our infringement example, let's assume that the claimant achieved the maximum mitigation effect by October 1, 2012. Therefore, October 1, 2012, would be the full mitigation date.

Fifth, the current date is the date on which the forensic analyst prepares the damages analysis and issues the damages report. The current date is the date on which the damages report is issued. This is not the same concept as the "as of" date in an intangible asset valuation. Typically, the forensic analyst will calculate the damages as of either of the following dates:

1. The damages event date
2. The trial date (or, at least, the expected trial date)

If the forensic analyst estimates the economic damages as of the damages event date, then all of the damages analyses will be based on projections and assumptions. That damages event date estimate will typically need to be adjusted to the trial date by the application of a pretrial interest rate.

Alternatively, the forensic analyst could estimate the amount of the damages that the claimant will incur up through the trial date. Since that damages estimate is measured as of the trial date, it does not have to be separately adjusted for pretrial interest.

Because of the timing of the litigation process, the forensic analyst will sometimes have to measure the damages as of the current date—that is, the damages report preparation date.

In that assignment, first, the analyst will typically measure the actual damages from the damages date through the current date. Second, the analyst will measure the expected damages from the current date through the trial date. Third, both measures of damages are adjusted (for pretrial interest) up to the trial date.

This pretrial interest calculation is sometimes performed by (1) the analyst, (2) the legal counsel, or (3) the finder of fact.

The intangible asset damages calculation is a matter of judgment and estimation. However, once an appropriate interest rate is determined, the application of the pretrial interest rate to the damages estimate is pretty much a mathematical calculation.

In our infringement example, let's assume that claimant's legal counsel retains the forensic analyst to quantify the intangible asset damages. The forensic analyst prepares the damages analysis and issues the expert report on February 1, 2013. Therefore, February 1, 2013, becomes the current date.

Sixth, the trial date is when the finder of fact hears the evidence with respect to the intangible asset dispute. Hopefully, the finder of fact quickly reaches the economic damages conclusion after the presentation of the damages evidence.

In that case, the trial date and the date of the damages award (if any) are reasonably close to each other. This discussion refers to a trial date. However, that date can also be a settlement conference date, a mediation date, an arbitration date, or any date on which the damages amount is determined.

In our trademark infringement example, let's assume that the litigation discovery proceeds quickly and that the trial commences on November 1, 2013. Therefore, November 1, 2013, is the trial date.

Seventh, the last day noted in the Figure 1 timeline is the end of damages date. This date represents the date at which the claimant no longer experiences any effects related to the respondent's wrongful actions.

Depending on the nature of the intangible asset damages, the end of damages date could occur before the current date. In that case, the forensic analyst may be able to measure the actual claimant damages without having to make any projections.

Alternatively, the end of damages date could be after the current date but before the trial date. In that case, the forensic analyst may be able to measure the actual claimant damages through the current date. The forensic analyst will have to project any expected additional damages after the current date (and until the end of damages date).

It also happens that the claimant may continue to experience damages through the trial date and into the future. Even an injunction that stops the respondent's misconduct may not abruptly end the claimant's damages. In that case, the analyst will have to estimate when the claimant will no longer experience damages. And, the analyst will have to project the amount of future damages up through that end of damages date.

In our trademark infringement example, let's assume that the respondent ceased its infringing activities shortly after the full mitigation date, say on December 1, 2012. Of course, by then, the market for the claimant's product has experienced six months of exposure to the respondent's infringement.

Even after (1) the respondent stops the wrongful action and (2) the claimant has mitigated the damage to the greatest extent possible, it may take quite a while for the claimant to no longer experience the residual effect of the infringement.

In our example, let's assume that the forensic analyst concludes that it will take two years after the last infringing activity before the market fully recovers from the effects of the respondent's wrongful action. In that case, the analyst will project the effects of the economic damages through December 1, 2014, the end of damages date.

In our example, the forensic analyst will calculate actual claimant damages through the current date and will estimate expected future economic damages through the end of damages date. Of course, presumably, the amount of the claimant's projected monthly damages between December 2012 and December 2014 will decrease as the effect of the respondent's infringement dissipates over time.

Intangible Asset Damages Analysis Purpose

As with the valuation purpose, the damages analysis purpose should describe the following:

1. The reason the analysis was prepared
2. The parties who may rely on the analysis conclusion

In the damages analysis, the purpose is typically to assist one party's legal counsel to represent that party's position in the intangible asset dispute. The parties who are expected to rely on the damages analysis and report are typically the parties to the dispute (including the legal counsel and the finder of fact).

In the assignment, the forensic analyst will typically work for one of the following parties:

1. The claimant (or the claimant's legal counsel)
2. The respondent (or the respondent's legal counsel)
3. The finder of fact (as an impartial expert to the court)

The forensic analyst may sometimes serve in the role as a mediator or arbitrator in the intangible asset dispute. In this role, the analyst assumes some of the responsibilities of the finder in fact.

The analyst may be asked to estimate economic damages so that this evidence can be presented in the legal counsel's case in chief. The analyst may also be asked to review and critique the analysis and report of the damages expert employed by the opposing party. In this case, the analyst will typically prepare a rebuttal report, and that evidence will be presented in the legal counsel's rebuttal case.

In any event, the forensic analyst should expect that the damages report will be submitted as evidence in the pending litigation. In addition, the analyst should expect to offer expert testimony in support of the damages analysis and report.

Accordingly, the analyst should prepare the damages report in compliance with the expert report evidentiary requirements of the relevant jurisdiction. The forensic analyst should consult with the client's legal counsel with regard to those expert report and expert testimony requirements.

With regard to both the analysis purpose and objective, it is the forensic analyst's responsibility to quantify the amount of compensatory damages related to the respondent's allegedly wrongful action.

It is not the analyst's responsibility to explain what law the respondent violated that would make the respondent's actions wrongful. That is the responsibility of the client's legal counsel. The forensic analyst will typically receive a legal instruction to assume that the respondent's actions are illegal. If the court finds that the respondent's actions were not illegal, then (from the perspective of the current claim), it doesn't matter how much damages the claimant suffered.

It is typically not the forensic analyst's responsibility to conclude if the respondent's actions caused the claimant's damages. That is, the analyst will typically receive a legal instruction to assume that the respondent's actions caused the claimant's damages. That legal claim will be supported at trial by a causation expert.

The responsibility of the forensic analyst is to measure the damages. The responsibility of the causation expert is to establish the causal link between the damages event (e.g., infringement, contract breach, etc.) and the claimant's post-damages condition.

Only when the damages event is within the forensic analyst's expertise (e.g., accounting fraud and misrepresentation) will the analyst also serve as the causation analyst. Otherwise, it is up to a causation witness (who may be an expert witness or a fact witness) to establish causation.

Damages Analysis Common Terminology

All terms are described from the forensic analyst's perspective. This discussion is not intended to provide legal descriptions of legal terminology. Every damages analysis typically starts with a damages event (or, at least, an alleged damages event). In that event, the respondent allegedly performed a wrongful act against the claimant. Typically, the wrongful act is either a contract breach or a tort.

In the case of a breach of contract, there is a contractual arrangement between the parties. Examples of such arrangements include: a customer/purchase contract, a supplier contract (for goods or services), an employment agreement, a noncompetition agreement, a nondisclosure agreement, an agreement to purchase or sell business assets or stock, a development or commercialization agreement, a franchise agreement, a joint venture or partnership agreement.

In the dispute, the respondent allegedly violates one or more contract terms, causing damages to the claimant. That breach of contract is the damages event.

The respondent can also cause damages to the claimant even if there is no contractual relationship between them. This can happen when one party owes a duty to another party and that second party violates that duty.

Examples of such duties include the following:

- An employee's duty to an employer
- A director's duty to a corporation and to its shareholders
- A competitor's duty to another competitor (not to interfere with a business opportunity, not to infringe on an intellectual property, etc.)
- A manufacturer's or service provider's duty to its customers
- A public corporation's duty to its stockholders
- A banker's duty to its loan customers

In the dispute, the respondent allegedly violates one or more of these duties, causing damages to the claimant. That violation is the damages event.

The forensic analyst typically quantifies the compensatory damages. Compensatory damages are also called actual damages. This is the amount of damages actually suffered by the injured party.

This is also the amount of compensation that is necessary to restore the injured party to the economic condition he or she was in before the damages event. If the claimant receives an award of the compensatory damages, then the claimant should be made whole from the effects of the wrongful act.

Compensatory (or actual) damages are different from punitive damages. The forensic analyst typically does not quantify punitive damages. Punitive damages may be awarded by the finder of fact (in addition to the award of actual damages) as a punishment to the respondent.

The finder of fact may conclude that the wrongful act was reckless, or deceitful, or malicious. In that case, the finder of fact can order the respondent to pay an amount above and beyond the claimant's actual damages. Again, this part of the award is intended to punish the respondent for bad behavior, and not to compensate the claimant for actual losses.

The claimant's compensatory damages may not be the same as the respondent's unjust enrichment. Basically, the claimant's damages indicates how much the claimant lost due to the wrongful act. In contrast, the respondent's unjust enrichment measures how much the respondent gained as a result of the wrongful act.

Often, these two measurements are not the same. The unjust enrichment is sometimes called the respondent's "ill-gotten gains."

The unjust enrichment may be traced to the allegedly wrongful act and to the damages event. However, the claimant's actual damages can be greater than the respondent's unjust enrichment; and, the respondent's unjust enrichment can be greater than the claimant's actual damages.

For some types of intangible asset damages, the claimant may claim the unjust enrichment as one measure of damages (e.g., in the case of a trademark infringement). However, the unjust enrichment is not available to the claimant in other types of damages claims.

The consideration of mitigation is a typical procedure in a damages analysis. However, this procedure is simply not relevant to an intangible asset valuation

analysis. After the damages event (i.e., the tort or breach of contract), the claimant should use ordinary care to alleviate the effects of the damages event.

That is, the claimant is expected to perform reasonable actions to mitigate the impact of the tort or the breach of contract. The claimant's damages analysis should measure the actual damages suffered by the injured party after considering the effects of mitigation.

Typically, the claimant's legal counsel will attempt to prove that the injured party's mitigation efforts were reasonable and sufficient. Typically, the respondent's legal counsel will attempt to prove that the injured party's mitigation efforts were insufficient and inadequate.

Damages Measurement Methods

The intangible asset damages methods and procedures are typically grouped into the following categories:

1. Lost profits—primarily historical (pre–current date) lost profits
2. Economic damages—primarily expected future (post–current date) lost profits
3. Cost to restore the intangible asset value
4. Reasonable royalty rate
5. Other methods

Each of these damages method categories are summarized below. Often, the forensic analyst will decide which method is most appropriate for the subject damages analysis. The analyst will make that decision based on the following:

1. The quantity and quality of available data
2. The facts and circumstances of the damages event.

However, the forensic analyst should consult with the client's legal counsel with respect to the selection of the damages method. In some cases, certain methods may be preferred as a matter of legal statute, judicial precedent, or administrative ruling.

In other cases, certain methods may not be allowable as a matter of legal statute, judicial precedent, or administrative ruling. In both sets of circumstances, the legal counsel should provide a legal instruction to the forensic analyst as to the acceptable or unacceptable damages methods.

Lost Profits Methods

"The claimant's damages analysis should measure the actual damages suffered by the injured party after considering the effects of mitigation."

This damages method calculates the profits lost by the claimant as a result of the respondent's allegedly wrongful actions. The historical lost profits are measured from the date of the first damages event until the current date of the analysis. The lost profits should consider the following:

1. The actions of (and the cost to) the claimant to mitigate the damages
2. The actions of the respondent to mitigate the damages

Historical lost profits are typically measured on a comparative or incremental basis. That is, the claimant's lost profits typically measure the difference between (1) the profits the claimant would have earned during the damages period if the alleged misconduct had not occurred and (2) the profits the claimant actually earned during the damages period after the respondent performed the alleged wrongful act.

For purposes of a lost profits analysis, profits are measured on a contribution margin (or an incremental cost) basis, and not on a GAAP (or full absorption cost) net income basis. That is, incremental lost profits are generally measured as (1) variable revenue minus (2) variable costs.

An allocation of the claimant's fixed costs (at any level on the income statement) is usually not considered in the lost profits measurement. This is because, by definition, fixed costs are fixed. Typically, the claimant will have to incur these fixed costs whether or not the damages event occurred.

Normally, historical lost profits are measured on a contribution margin basis as described above. The forensic analyst may measure lost profits on a net cash flow basis, instead of an income statement basis. That is, the analyst may consider such cash flow components as capital expenditures, depreciation and amortization expenses, and net working capital changes.

However, even in this measurement of lost profits, the forensic analyst measures lost net cash flow on a contribution margin (or incremental) basis.

Economic Damages Methods

The various economic damages methods typically consider the claimant's expected lost profits from the current date up to the end of the damages period. In other words, these measures of economic damages typically include a projection of expected future lost profits. The difference in the measurement methods is primarily related to how these projections are made.

As with historical lost profits, the economic damages should consider both of the following:

1. The actions of the claimant to mitigate the damages
2. The actions of the respondent to mitigate the damages

There are three common economic damages methods:

1. The before and after method
2. The projection/"but for" method
3. The yardstick method

The objective of each method is to estimate the amount of lost profits related to the damages event from (1) the current (analysis) date through (2) the expected end of the damages period.

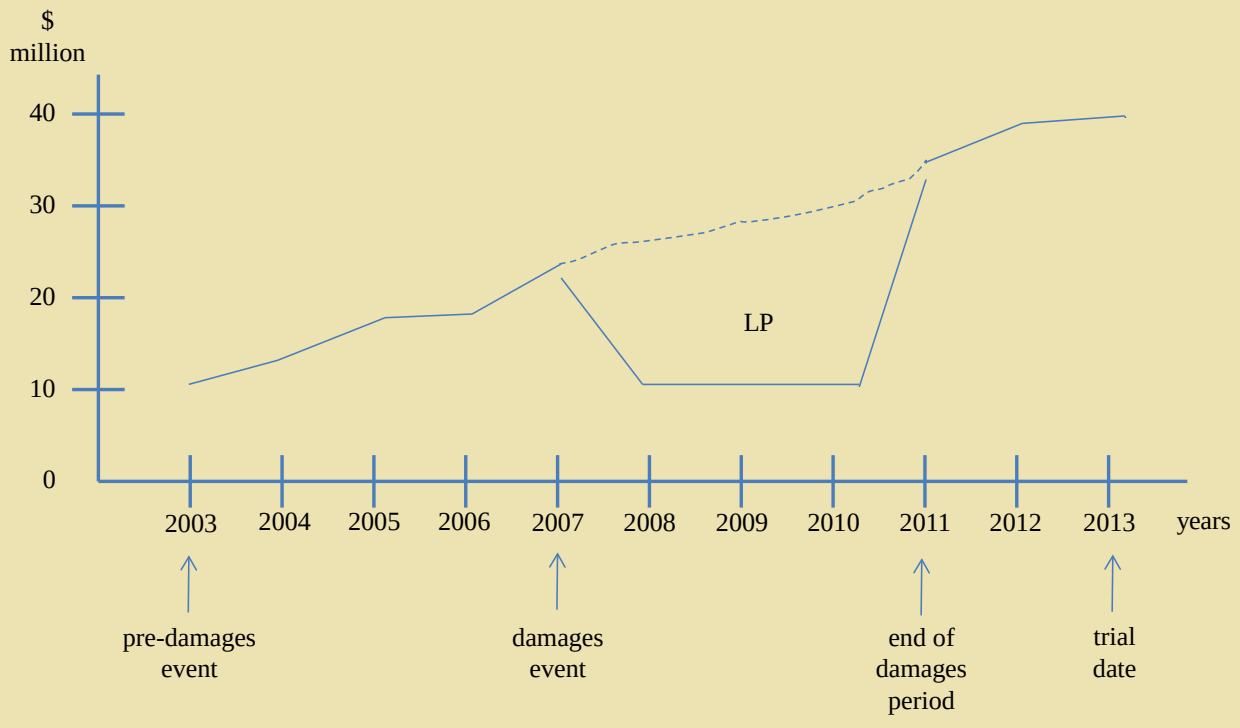
The before and after method is most effective when the forensic analyst has two sets of financial data available:

1. Claimant results of operations for several periods prior to the damages event
2. Claimant results of operations for several period after the end of the damages period

If the forensic analyst does not have either of these data sets available, then the before and after damages measurement method may have limited application.

In this method, the analyst compares the "before" results of operations and the "after" results of operations. Based on this comparison, the analyst extrapolates the claimant results of operations "but for" the damages event. Figure 2 presents a simple illustration of the before and after method.

Figure 2
White Company Economic Damages
The Before and After Method
Based on Contribution Margin Profits



LP stands for lost profits

In this illustration, let's assume that Black Company ("Black") breached its contract with White Company ("White") early in 2007. Even after its mitigation efforts, it took until 2011 for White to fully replace the Black contracts and to fully recover from the damages event.

Figure 2 indicates the White profitability trend for the several years prior to the Black wrongful act. The solid line in this figure shows the actual White profits for the 2007–2011 damages period. Also, Figure 2 presents the White actual profits for several years after it has recovered from the Black contract breach.

The dotted line between 2007 and 2011 represents the analyst's projection of what the White profits would have been but for the Black wrongful act. The interior area labeled "LP" represents the total lost profits that White suffered as a result of the Black breach of contract.

Of course, this application of the before and after method assumes that the current date does not occur until after 2011. That is, the analyst is not retained and does not prepare the economic damages report until after the end of the damages period.

Most injured parties will not want to wait that long to pursue their claim against the wrongful party. That is, most injured parties do not want to wait until "all of the dust has settled," and the analyst has actual post-damages period financial statements available.

Effectively, this method projects claimant economic damages based on an analysis of actual claimant restored profitability. For all measures of profits (i.e., before, during, and after the damages period), this method measures profits as contribution margin (i.e., variable revenue minus variable costs only).

The projections method (a/k/a, the but for method) is more commonly applied in an intangible asset damages analysis. This is because the forensic analyst does not have to wait until the damages period is over and the claimant has recovered in order to prepare the damages measurement.

In addition, the injured party does not have to wait until the damages period is over and "normal" profit levels are restored before it exercises its legal rights against the respondent.

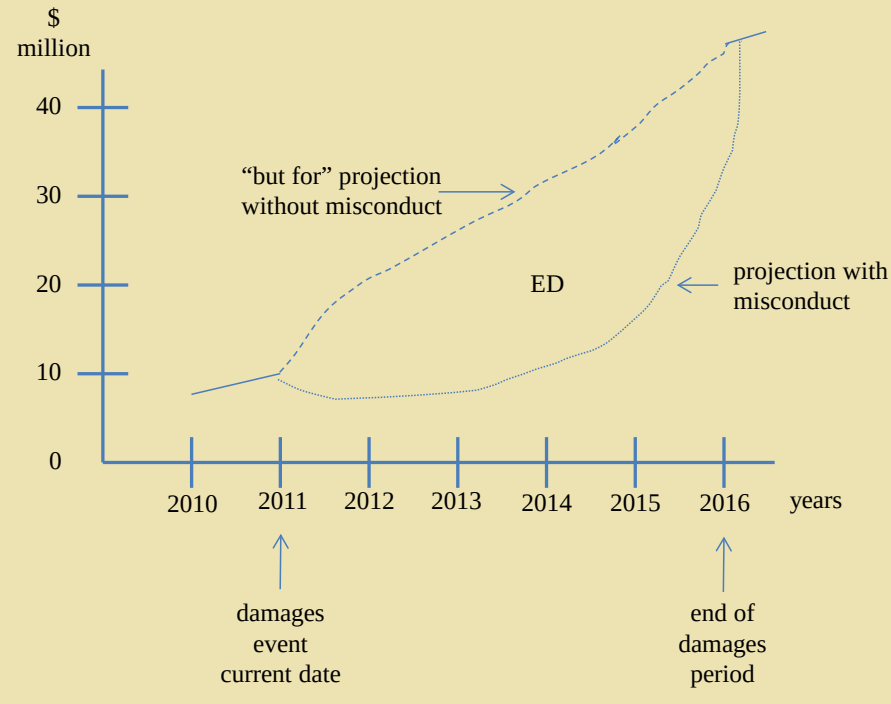
The principal component of the projection method is the projection of claimant lost profits after the current date. Therefore, this measurement method can be used if the current date is relatively soon after the damages date. This measurement method can also be used when there is little or no historical results of operations to incorporate into the before and after method. Such a set of circumstances often occurs when the damage is suffered by a new business, a new product line, a new contract, or a new intangible asset.

Figure 3 presents a simple illustration of the projections method.

As with all damages measurement methods, this method uses contribution margin as the measure of claimant profits.

In Figure 3, let's assume that Blue Company ("Blue") has a relatively new product line. The period of 2010 to 2011 presents the actual results

Figure 3
Blue Company Economic Damages
The Projections Method
Based on Contribution Margin Profits



ED stands for economic damages

of operations for the claimant. Let's assume that Yellow Company ("Yellow") committed the damages event at the start of 2011.

The damages event is discovered immediately, and the Blue legal counsel retains a forensic analyst to quantify the economic damages. Therefore, the current date is also in the early part of 2011.

The analyst will rely on a projection of Blue results of operations "but for" (or without) the impact of the damages event. This projection may be prepared by any of the following:

1. Blue Company management
2. An industry expert
3. The analyst

This but for projection is illustrated with a dash line in Figure 3.

If the forensic analyst does not prepare the projections, then the analyst should perform reasonable due diligence procedures before accepting the projections. These due diligence procedures will vary in virtually every instance.

Ideally, the analyst will have access to projections prepared prior to the damages event. Also, ideally, such projections may have been prepared for business decision-making purposes, such as company investment rationing, presentation to bankers, presentation to shareholders, and so on.

Next, the analyst will require a projection of the claimant's results of operations incorporating the impact of the damages event. By definition, this projection has to be prepared after the damages event has occurred.

This projection is illustrated by a dotted line in Figure 3. This dotted line starts the damages event date and continues until the injured party fully recovers from the damages event. That end of damages date occurs when the two projection lines cross.

Of course, the analyst will have to also perform reasonable due diligence projections with respect to the "with damages" projection. Nonetheless, the analyst should expect that there may not be much data available to confirm the "with damages" projection. This is because Blue did not expect—and did not budget for—the Yellow wrongful act.

The area inside the two lines on Figure 3 represents the damages suffered by Blue. This total amount of economic damages is labeled "ED" inside the Figure 3.

The yardstick method also measures intangible asset damages by reference to a claimant financial projection. In the yardstick method, the basis for the injured company's projection is an independent yardstick. In this method, a dependent variable that is difficult to project (i.e., claimant results of operations) are related to an independent variable that is less difficult to project (e.g., a macroeconomic statistic or a demographic statistic).

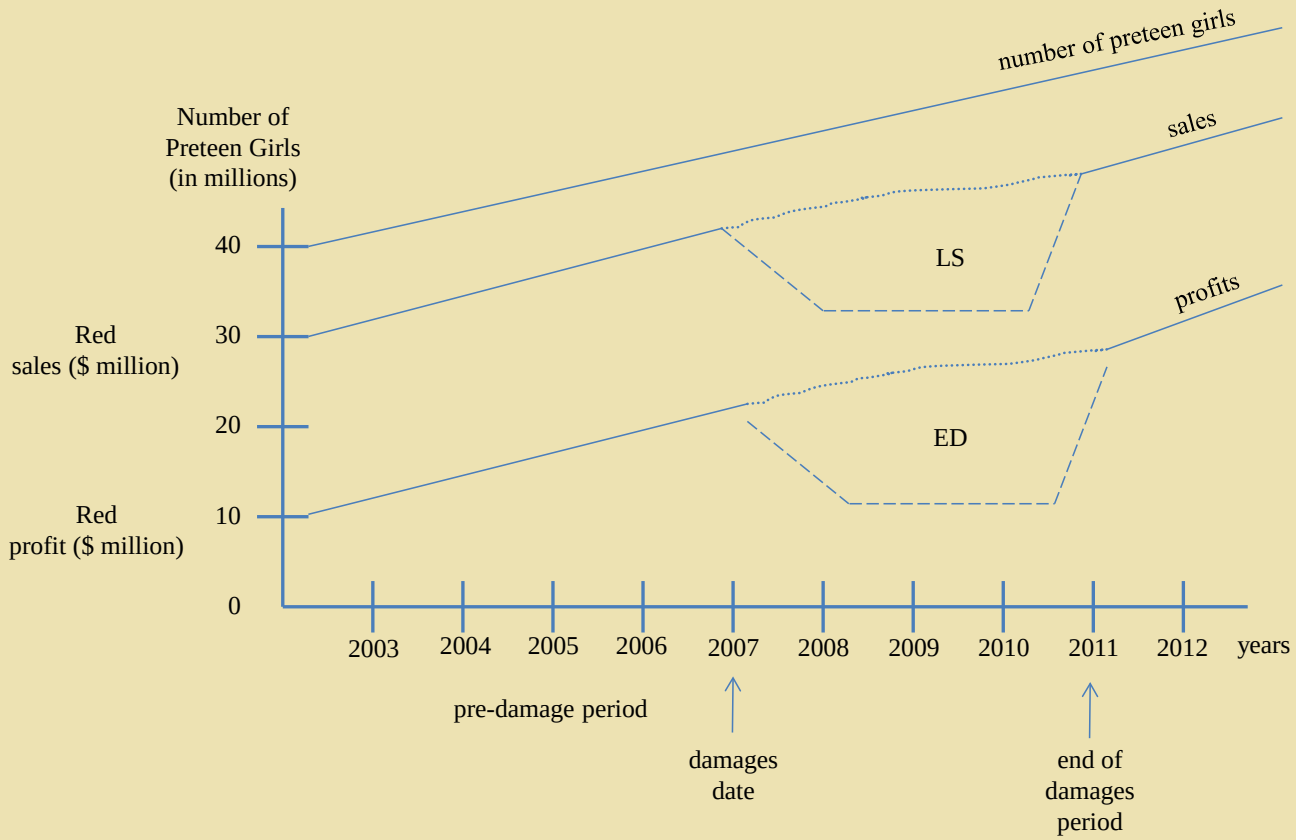
Using this method, first the analyst identifies an independent variable that correlates to claimant revenue or profits. Second, the analyst obtains independent projections of the independent variable (e.g., national residential construction, the money supply, the GNP growth rate, the number of teenage girls in the American population). Third, the analyst uses this yardstick to project the claimant results of operation without the impact of the damages event. Fourth, the analyst obtains a projection of the claimant results throughout the damages period. And, fifth, the difference between the yardstick projection and the projection with misconduct indicate the expected lost profits related to the damages event.

Figure 4 presents a simple illustration of the yardstick method. In Figure 4, the analyst is asked to measure the economic damages to Red ("Red") as a result of the wrongful action of Green Company ("Green").

In this example, Red manufactures princess-themed toys that are marketed to preteenage girls. For the 2003 through 2007 pre-damages period, there is a very strong correlation between the general population of preteen girls and the sales of Red toys.

In addition, there is a very strong correlation between Red sales and Red profits (measured on a contribution margin basis). These three variables (i.e., consumer demographics, sales, and profit) are indicated by the solid lines on Figure 4.

Figure 4
Red Company Economic Damages
The Yardstick Method
Based on Contribution Margin Profits



At the beginning of 2007, Green performs a wrongful act against Red Company, and Red is damaged. The Red legal counsel promptly retained a forensic analyst to measure the amount of economic damages. Red management did not have any long-range financial projections prepared. However, the analyst was able to obtain from government sources a five-year demographic projection of the preteen female population.

With this yardstick projection, the analyst and Red management projected what sales and profits would have been if Red had not been damaged by Green. Then, the analyst and Red management worked together to prepare a projection of expected company results of operations over the next four years. These projections encompassed the expected impact of the wrongful act on the Red sales and profit.

The four-year projection period is the expected damages period—that is, the total time period between (1) the damages event and (2) the date when Red will have fully recovered from the damages.

In Figure 4, the yardstick projections for Red sales and profits are indicated with the dotted lines. In this figure, the expected sales and profits after the impact of the damages are indicated with the dash lines.

In the bottom of the figure, the interior of the intersection of the dotted lines and the dash line is indicated by the letters ED. This interior area represents the expected amount of economic damages that Red suffered as a result of the Green wrongful action.

As with the other damages measurement methods, the damages are measured by the analyst as of

the current date. This analysis considers the impact of all mitigation actions performed by both the claimant and the respondent. And, lost profits are measured on a contribution margin basis.

Also, as with all economic damages measurement methods, lost profits relate to lost revenue. And, lost revenue includes both of the following:

1. Any decrease in unit volume
2. Any decrease in unit prices

The decrease in unit price is also known as "price erosion." And, the lost revenue relates to both of the following:

1. Lost sales directly related to the damages event
2. Lost sales indirectly (or consequentially) related to the damages event (e.g., the loss of follow-on sales of maintenance services or replacement/repair parts).

Cost to Restore Value

The cost to restore value method typically measures the difference in the intangible asset value before the damages event and the intangible asset value after the damages event. In this method, there are typically two cost components to the lost intangible asset value (or the cost to restore the intangible asset).

Both of these cost components are typically considered in the damages analysis. The first component is the direct reduction in the intangible asset value. The second component is the claimant company lost profits during the intangible asset restoration period. This lost profits component may be considered as an opportunity cost, or as part of the cost to restore the claimant to its condition before the damages event occurred.

For example, let's assume that retail mall owner Grey agrees with franchise restaurant operator Brown that Brown will be the only external restaurant on the mall property. Based on this contractual agreement, Brown rents the vacant restaurant building and opens the franchise operation.

After several years of operations, Brown engages an analyst to perform an independent valuation of the franchise. The independent analyst estimates that the value of the franchise agreement is $10 million. Then, Grey allows another (competitor) franchise restaurant operator to build a restaurant on the same mall property.

Let's assume that Grey has breached its contract with Brown. And, let's assume that Pink, the new franchise restaurant, draws revenue and profits from Brown. One year after Pink opens, Brown sells his franchise agreement to another restaurant operator for $7 million.

Brown had a franchise with a $10 million value before the damages event (i.e., the breach of contract). Brown has a franchise with a $7 million value after the damages event (based on the arm's-length sale of the franchise) and there is no other explanation for the difference. The direct component of the cost to restore Brown to his pre-damages condition is $3 million (i.e., $10 million pre-damages value – $7 million after damages value).

In addition, let's assume that Brown also experienced lost profits during the intangible asset restoration period. Here, the restoration (or partial restoration) event is the third-party sale of the Brown franchise.

Let's assume that Brown expected to earn $2 million in contribution margin during the last year. This expectation, of course, assumes no competition from Pink. And, this expectation is based on the operating results of the Brown restaurant during the last few years.

During the last year, with the Pink competition, the Brown restaurant actually earned only $1 million in contribution margin. So, Brown experienced lost profits (an opportunity cost) of $1 million (i.e., $2 million pre-damages profits – $1 million after-damages profit).

So, the entire cost to restore damages experienced by Brown is summarized in Exhibit 6:

This illustrative calculation assumes that the analysis current date occurs right after the sale of the Brown franchise. Therefore, there are no interest calculations included in this example.

The first component of the cost to restore value method typically compares (1) intangible asset value before damages event to (2) intangible asset value after damages event.

Often, the damaged intangible asset still has some positive value (although a decreased value) after the damages event. That is why the damages amount is typically not equal to the pre-event intangible asset value. However, there are instances when the damages event totally decreases the intangible asset value to $zero.

The formula for the first component of the intangible asset damages is still as follows:

Value before damages event

minus

Value after damages event

Exhibit 6
Brown Franchise Restaurant
The Cost to Restore Damages Method
Economic Damages Estimate

Cost to Restore the Intangible Asset Value	Damages Amounts
Component I - direct cost to restore the claimant intangible asset (compensation required to restore the $10 million franchise value)	$3 million
Component II - indirect cost to restore – lost profits opportunity cost during the intangible asset restoration period ($1 million lost profits)	1 million
Total Brown intangible asset economic damages	$4 million

However, in this instance, the after damages event value is nil. So, practically, the amount of damages is equal to the pre-event intangible asset value.

Using the cost to restore value method, the forensic analyst can estimate the fair market value, fair value, investment value, or any other standard of value for the damaged intangible asset. What is important is that the forensic analyst estimate the same standard of value for the pre-damages value estimate and for the post-damages value estimate.

Reasonable Royalty Method

This damages method estimates what a third-party licensor would pay to a third-party licensee for an arm's-length use license related to the intangible asset. Therefore, this damages method does not apply to all types of intangible asset damages.

For example, it may not be applicable to many breach of contract (or of noncompete, nonsolicitation, nondisclosure, franchise, or other agreement) disputes. However, this method is particularly applicable to certain types of tort claims, such as an infringement, tortious interference, or other wrongful use of the claimant's intangible asset.

This damages method models the scenario where the respondent approaches the owner/operator in good faith and negotiates an arm's-length license for the lawful use of the intangible asset.

The principle underlying this method is as follows:

1. The licensee would be willing to pay a fair royalty rate for the inbound license of the claimant intangible asset.
2. The licensor would be willing to accept a fair royalty rate for the outbound license of the claimant intangible asset.

By infringing or otherwise misappropriating the claimant's intangible asset, the respondent is preventing the claimant from receiving the fair royalty income on the hypothetical use license. And, if the respondent paid the claimant this fair royalty income, then the claimant would be compensated for this damages measure. In the application of this method, the fair royalty rate is either applied to either of the following:

1. The claimant's revenue
2. The respondent's revenue

The royalty income based on the revenue the claimant did not enjoy measures lost income to the injured party. The royalty income based on the respondent's revenue measures unjust enrichment to the injuring party.

This is another way in which an intangible asset damages analysis is different from an intangible asset valuation. In an intangible asset valuation, the royalty income is based on the owner/operator (in this case, the claimant) revenue.

Other Methods

The other methods category includes two types of methods.

First, there are statutory damages amounts for certain types of wrongful acts. For example, federal law provides for a statutory damages amount (which may be sought by the claimant) in the case of copyright infringement or trademark infringement.

Second, sometimes the forensic analyst may develop a de novo damages method based on the facts and circumstances of the individual case. In such a case, the analyst believes that the case-specific damages method is more appropriate than the above-described damages methods.

"The objective of the damages analysis is to place the injured party in the same financial condition as if the damages event had not occurred."

Intangible Asset Economic Damages Considerations

This discussion summarizes the procedures related to each of the above-described economic damages methods. The alleged misconduct may affect, for example, product pricing, features, costs, and the sale of related (or "convoyed") products.

First, with respect to historical lost profits, profitability is measured on a contribution margin (or incremental) basis. This is because the forensic analyst is primarily concerned with the claimant's financial fundamentals that changed as a result of the damages event.

If the claimant fixed costs do not change as a result of the damages event, then these fixed costs are typically not considered in the analysis. This also means that even a claimant that is experiencing negative net income can suffer lost profits due to a damages event.

Second, with regard to each of the economic damages methods, the forensic analyst should be able to explain a reasonable basis for the claimant's financial projections. Regardless of the measurement method, the analyst should perform sufficient due diligence in order to become generally comfortable with the financial projections.

This does not mean that the analyst cannot rely on the injured company management or on other experts to prepare the financial projections. However, the analyst should understand the basis on which the projections were prepared.

In addition, the forensic analyst is typically not the damages causation expert. Rather the analyst is the damages measurement expert. The analyst will typically rely on fact witnesses, other expert witnesses, or other evidence to support the assumption that the respondent's actions (1) were wrongful and (2) caused the damages.

Therefore, the forensic analyst is responsible for performing reasonable due diligence related to the financial projections, but not related to legal liability or the damages causation.

Third, related to the cost to restore value method, the forensic analyst can use either the income approach, the cost approach, or the market approach to value the damaged intangible asset. The measurement of the cost to restore (also called the cost to cure) does not mean that the analyst must use the cost approach to value the damaged intangible asset.

What is important is that the analyst use the same valuation approach before the damages event and after the damages event. In addition to restoring the value decrement, the analyst should also consider any claimant opportunity cost (such as lost profits) during the intangible asset restoration period.

Fourth, with regard to the reasonable royalty rate measurement method, the forensic analyst can use a variety of generally accepted methods to estimate the royalty rate. The comparable uncontrolled transactions (CUT) method is the most commonly used method.

The analyst may also use the profit split method (or the residual profit split method) to estimate an arm's-length royalty rate. The analyst could use the residual (or excess) profit margin method to estimate the fair royalty rate. Or, the analyst could use the comparable profit margin (CPM) method to estimate the third-party royalty rate.

Fifth, with respect to other damages methods, the forensic analyst should consider the following:

1. Is the selected method reasonable for the circumstances?
2. Does the selected method measure the impact of the damages event (and not some other trend or phenomenon)?

In the case of a statutory method, the analyst should obtain legal guidance from the client's legal counsel as to the application and amount of such damages.

The Damages Award Is a Taxable Event

The award of compensatory (and punitive) damages is typically a taxable event to the damaged party. That is, the claimant typically has to recognize taxable income related to the damages award. The objective of the damages analysis is to place the injured party in the same financial condition as if the damages event had not occurred.

Therefore, if the claimant pays out a portion of the damages award as income tax expense, then the claimant may not be in the same financial condition as before the damages event. This would occur if the actual damages are calculated by reference to after-

Exhibit 7
Tan Company
Recommended Judicial Award
Income Tax Adjustment Procedure

Factor	Recommended Judicial Award		Amount
1.	Estimate of claimant's intangible asset actual damages (based on any damages measurement method)		$10,000,000
2.	Estimate of income tax adjustment on the compensatory damages (1 - assumed 35% income tax rate)	÷	65%
3.	Recommended total judicial award required to restore the claimant to its financial condition before the damages event		$15,385,000

tax lost profits. In that case, the claimant effectively "pays" income taxes on the projected lost profits.

And, the claimant actually pays income taxes again on the receipt of the judicial award. Such a double taxation is an unfair burden to the claimant. Accordingly, in the case of the after-tax lost profits analysis, the judicial award should be sufficient to (1) cover the amount of actual damages and (2) pay the income tax expense on the actual damages.

Forensic analysts often use two procedures to adjust the actual damages amount so as to consider this claimant's income tax liability.

In the first procedure, the analyst projects all expected future lost income on a pretax basis. Then, the analyst present values that pretax lost income projection using an after-tax discount rate. This calculation results in a recommended damages award that includes both (1) the future lost profits and (2) the income tax liability on the judicial award.

While technically appropriate in certain circumstances, this tax adjustment procedure may be difficult to explain to a finder of fact who is used to the tax level of projected income being equal to the tax level of the discount rate. In addition, this tax adjustment procedure only works in instances where the analyst projects the claimant's future lost income.

In the second procedure, first the analyst measures the amount of the claimant's actual damages, using any of the above-described measurement methods. (If there is lost profits involved in this analysis, the lost profits should be considered on an after-tax basis.) Second, the analyst calculates the income tax liability related to the judicial award of actual damages. Third, the analyst adds together these two calculated figures. Fourth, the sum is the recommended judicial award that will make the injured party "whole" after the damages event.

Exhibit 7 illustrates this second tax adjustment procedure for claimant Tan Company ("Tan").

Exhibit 8 illustrates how the claimant Tan is restored to its pre-damages financial condition as a result of this income tax adjustment procedure.

Exhibit 8
Tan Company
Income Tax on Adjustment Judicial Award
Reconciliation to the Actual Economic Damages

Factor	Actual Economic Damages Amount		Amount
1.	Assume the finder of fact orders the recommended total award (i.e., taxable income to the claimant)		$15,385,000
2.	Income tax expense related to the judicial award (at the 35% income tax rate)	–	5,385,000
3.	Reconciliation to intangible asset actual damages (i.e., actual after-tax lost profits)		$10,000,000

As illustrated above, dividing the actual damages calculation by 1 – the claimant's income tax rate will result in the judicial award that will make the injured party "whole" after the payment of the income tax expense on the total judicial award.

Intangible Asset Damages Are Not Equal to Intangible Asset Value

The amount of the economic damages suffered by the claimant could be more than or less than the intangible asset value. The amount of the intangible asset damages will equal the intangible asset value only in limited circumstances.

The amount of economic damages could be greater than the intangible asset value. This could be the case with regard to an intangible asset that was not yet commercialized. Nonetheless, that intangible could be expected to generate either operating income or royalty income to the claimant.

The amount of economic damages could be less than the intangible asset value. The damages event could relate to the breach of a single contract related to an intangible asset that could service hundreds or thousands of contracts. In that case, the intangible asset value would be decreased. But, it would likely be decreased by a small percent of the total intangible asset value.

Intangible Asset Damages Illustrative Example

In this hypothetical example, Gold Company ("Gold") developed a trade secret. Eddy Engineer signed a nondisclosure agreement with respect to all of the Gold trade secrets. Eddy left Gold to work for competitor Silver Company.

After being hired by Silver, Eddy disclosed the Gold product trade secret formula to Silver management. Silver started to manufacture a new product, to the detriment of Gold sales and profits. The new Silver product clearly incorporates the Gold trade secret.

The Gold legal counsel retained the forensic analyst. The analyst's assignment is this: assuming that Silver continues to sell its competitive product over the Gold trade secret remaining useful life (RUL), what is the amount of damages to the Gold trade secret?

For the last year or so, Gold has produced a popular low-calorie meal replacement bar (MRB) product that has a good taste, crunchy texture, high protein, and nutritional balance. The trade secret is the proprietary process by which this MRB product is manufactured.

The trade secret is the compress and form manufacturing process of the MRB product recipe and formulation. This trade secret is documented in a set of engineering drawings and in a process flowchart notebook. Gold management has elected not to patent this proprietary process for competitive reasons. Both the Gold engineers and the Gold legal counsel believe that the manufacturing process would be patentable.

Nonetheless, if the trade secret became public knowledge through the patent procedure, management is concerned that the company competitors could reverse engineer a substitute manufacturing process that would not violate the patent.

Gold management treats this proprietary technology as a trade secret. All of the engineering and other documentation related to this manufacturing process is protected in a locked cabinet in the process engineering department. Only a select number of Gold engineering and production managers (including Eddy Engineer) had access to that information. All of those employees understand that the asset is protected and have executed nondisclosure agreements.

Management also believes that this proprietary process gives the company's MRB product a distinct competitive advantage. Gold marketing personnel stress this protected product's differentiation feature in all of the company marketing materials and presentations.

The forensic analyst decided to use the projections/but for measurement method to estimate the economic damages based on expected future lost profits. The analyst projected the expected profits associated with the MRB product before the trade secret disclosure. The analyst then projected the

expected profits from the MRB product line after the trade secret disclosure.

The trade secret value damages estimate is based on the difference between the two different operating scenarios—that is, (1) results of operations before the trade secret disclosure and (2) results of operations after the trade secret disclosure.

Gold marketing management provided projections of the MRB product unit selling price, unit volume, and market share for the five years after the damages date. Management also projected the variable cost of goods sold related to the MRB product.

In addition, management prepared a five-year projection of the variable selling, general, and administrative expenses related to the MRB product line. After a due diligence review of the financial projections, the forensic analyst concluded that these financial projections were reasonable. These projections are presented in Exhibit 9.

For purposes of this analysis, the forensic analyst defined profits as follows:

	Net sales
Less:	Variable cost of sales
Less:	Variable operating expenses
Less:	Incremental income taxes
Equals:	Profits (contribution margin)

Based on industry experience, management expects that it will develop a replacement trade secret in about five years. Both Gold and all of its competitors continuously develop improved MRB products. The Gold process engineering staff is already working on the development of a new and improved compression process.

Management expects that the new and improved process will be developed, tested, and implemented within five years. At that time, for purposes of this analysis, the current trade secret will be obsolete.

The five-year expected RUL is consistent with the Gold historical experience regarding its trade secret technology life cycle. And, the five-year expected RUL is consistent with the industry's historical experience regarding a trade secret technology life cycle. Therefore, the analyst selected five years as the appropriate measure of the trade secret RUL.

In the second set of projections, presented in Exhibit 10, the projected decrease in product line sales is based on the analyst's discussions with management. This projected sales decrease indicates management's estimate of the impact of the Silver product competition, including the decreased unit selling price and the decreased unit volume sales.

Management estimated that it would also have to increase its variable marketing expense due to the Silver competition.

Based on the economic damages summary presented in Exhibit 11, the analyst expects that Gold will suffer actual damages of $11,026,000 if Silver continues to violate its trade secret. This estimate of economic damages assumes that Silver continues its wrongful actions over the intangible asset five-year RUL.

Since such a compensatory damages award would be taxable to Gold, the forensic analyst adjusted the actual damages amount, by dividing it by (1 – income tax rate). Assuming a 35 percent income tax rate, this adjustment for taxation on the lost profits would be calculated as follows:

Estimate of the claimant expected lost profits	$11,026,000
Income tax adjustment (@ 35% income tax rate)	÷ 65%
Recommended judicial award to make the claimant whole	$16,963,000

Exhibit 9
Gold Company
Trade Secret Economic Damages Analysis
The Projections/But For Method
Scenario I: Operating Projections Without the Trade Secret Violation

($ in 000s):	Year 1	Year 2	Year 3	Year 4	Year 5
Net sales	$146,912	$161,603	$177,763	$195,540	$215,094
Variable gross margin	38,197	42,017	46,219	50,840	55,924
Variable operating expenses [a]	(16,160)	(17,776)	(19,554)	(21,509)	(23,660)
Contribution margin without trade secret damages	22,037	24,240	26,665	29,331	32,264

Note:
[a] includes incremental income tax expense

Exhibit 10
Gold Company
Trade Secret Economic Damages Analysis
The Projections/But For Method
Scenario II: Operating Projections With the Trade Secret Violation

($ in 000s):	Year 1	Year 2	Year 3	Year 4	Year 5
Net sales without the trade secret damages	$146,912	$161,603	$177,763	$195,540	$215,094
Expected post-damages sales decrement	(14,691)	(16,160)	(17,776)	(19,554)	(21,509)
Net sales with the trade secret damages	$132,221	$145,443	$159,987	$175,986	$193,584
Variable gross margin	34,377	37,815	41,597	45,756	50,332
Variable operating expenses [a]	(15,205)	(16,726)	(18,399)	(20,238)	(22,262)
Contribution margin with trade secret damages	19,172	21,089	23,198	25,518	28,070

Note:
[a] includes incremental income tax expense

Exhibit 11
Gold Company
Trade Secret Economic Damages Analysis
The Projections/But For Method
Economic Damages Analysis Summary

($ in 000s)	Year 1	Year 2	Year 3	Year 4	Year 5
Contribution margin without trade secret damages [a]	$22,037	$24,240	$26,665	$25,331	$32,264
Contribution margin with trade secret damages [a]	19,182	21,089	23,198	25,518	28,070
Expected future lost profits due to damages event	2,855	3,151	3,467	3,813	4,194
Present value factor (assume 20% after-tax rate)	0.9091	0.7576	0.6313	0.5261	0.4384
Present value of expected future lost profits	2,605	2,387	2,189	2,006	1,839
Total actual damages to trade secret intangible asset (before consideration of income tax adjustment)	11,016				

Note:
[a] after incremental income taxes

Therefore, the forensic analyst recommends a judicial award of $16,963,000 to Gold due to the wrongful actions of Silver and Eddy Engineer.

Summary and Conclusion

This discussion summarized the fundamental principles related to intangible asset economic damages analysis. This discussion summarized the differences between economic damages analysis and valuation analysis.

And, this discussion summarized the damages analysis, purpose and objective, described common damages analysis terminology, and explained typical economic damages analysis methods. In addition, this discussion presented an illustrative example of a simplified intangible asset (i.e., trade secret) economic damages analysis.

This discussion focused on intangible asset damages analysis measurement only. That is, this discussion did not consider the calculation of prejudgment interest.

And, this discussion did not explicitly describe the present value of the expected future lost profits. Therefore, this discussion did not encompass the mathematics of an intangible asset damages analysis.

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