

Calculating Damages in Misappropriation of Trade Secrets Matters

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This discussion explores the unique considerations related to calculating damages in misappropriation of trade secrets cases. This discussion includes an analysis of plaintiff's damages remedies in trade secret cases, including plaintiff's actual loss, defendant's unjust enrichment, valuation of trade secrets, and reasonable royalty, and defendant's rebuttal strategies for reducing and/or eliminating plaintiff's damages. It is important that the analyst link the damages to the alleged misappropriated trade secret(s) and tie the damages remedies to the specific facts and circumstances of the case.

INTRODUCTION

Trade secrets litigation is on the rise, particularly due to an increase in unauthorized use of electronic information through mobile devices and data storage from corporate insiders or partners (e.g., employees, management, board of directors, consultants, independent contractors, suppliers/vendors), competitors, and perpetrators of cyber espionage/data theft (e.g., hackers, organized criminals, foreign governments).^{1,2}

Calculating damages in a misappropriation of trade secrets experts can be a complex exercise due to varying state laws that apply to these cases. These state laws encompass employment, intellectual property, tort, contract, and white-collar criminal law.

A report issued by the U.S. Chamber of Commerce states that “publicly traded U.S. companies own an estimated \$5 trillion worth of trade secrets.”³

Misappropriation of trade secrets cases are generally brought in state court and appealed via local circuits to U.S. Supreme Court. U.S. litigation statistics show a large increase in cases of misappropriation of trade secrets: the number such cases doubled between 1988 and 1995; doubled again

from 1995 to 2004; and is expected to double yet again by 2017.⁴

According to the Federal Bureau of Investigation (FBI), the number of economic espionage and theft trade secrets cases handled by its Counterintelligence Division increased by 60 percent from fiscal year 2009 to the end of fiscal year 2013.⁵

The impact of trade secrets misappropriation and economic espionage in the United States has been estimated to be approximately \$350 billion, which represents more than 2 percent of the U.S. gross domestic product.⁶

Factors behind the increase in the trade secrets litigation include the following:

1. Digital technology
2. A mobile workforce
3. The rising value of intellectual property, which include trade secrets
4. The adoption of the Uniform Trade Secrets Act
5. The flexible definition and characteristics of trade secrets
6. An increase in international threats
7. The decision whether to pursue trade secret or patent protection⁷

The top 11 reported settlements of litigation matters involving trade secrets legal claims are included in Table 1.⁸

This discussion contemplates the following topics:

- Definition of trade secret
- Definition of misappropriation
- Plaintiff's remedies in misappropriation of trade secrets matters
- Plaintiff's lost profits
- Defendant's profits
- Valuation of trade secrets
- Reasonable royalty
- Defendant's rebuttal strategies for damages calculations
- Proposed Defend Trade Secrets Act of 2015 (DTSA)

DEFINITION OF TRADE SECRET

The two commonly used definitions of trade secrets are from the:

1. Uniform Trade Secrets Act (UTSA) and
2. U.S. Economic Espionage Act (EEA).

According to Section 1.4 of the UTSA, a trade secret

means information, including a formula, pattern, compilation, program, device, method, technique, or process that:

- (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and
- (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.¹⁰

Some form of the UTSA has been enacted by 47 states and the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. It is important to note that there are variations and significant differences among the states that have adopted UTSA.¹¹

The three state exceptions on the UTSA include New York, Massachusetts, and North Carolina.^{12,13}

- New York generally follows the Restatement (Third) of Unfair Competition.

- Massachusetts trade secret law is based on a combination of statutory law and common law principles.
- North Carolina has adopted a state statute, which codifies several of the key principles of the UTSA.

Even though 47 states have adopted some form of the UTSA, there are significant differences in the state statutes for items such as the definition of a trade secret, definition of misappropriation, exemplary damages, awarding of attorneys' fees (non-uniform tests for bad faith), statutes of limitations, definition of a person, differences in damages measured by a reasonable royalty, adoption of inevitable disclosure doctrine, and so on.

In addition, some states did not enact all provisions of the UTSA and some states enacted unique statutory provisions.¹⁴

According to Section 1839 of the EEA, a trade secret

means all forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if:

- (A) the owner thereof has taken reasonable measures to keep such information secret; and
- (B) the information derives independent economic value, actual or potential, from not being general known to, and not being readily ascertainable through proper means by, the public.¹⁵

According to Section 757 of the New York First Restatement of Torts, certain factors are

to be considered in determining whether given information is one's trade secrets are:

1. the extent to which the information is known outside of the business;
2. the extent to which it is known by employees and others involved in the business;
3. the extent of measures taken to guard the secrecy of the information;

Table 1
Top 11 Litigation Settlements Involving Trade Secrets
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Rank	Amount	Settlement Payee	Case Name
#1	\$1.1 billion (VW agreed to pay \$100 million and buy at least \$1 billion of auto parts from GM).	General Motors Corp.	<i>General Motors Corp. v. Lopez de Arriortua</i> , 2:96-CV-71038-NGE, E.D. Mich. (Jan. 1997)
#2	\$400 million paid by IBM to settle trade secret and antitrust claims (IBM agreed to license \$140 million in Compuware software and buy \$260 million in Compuware services).	Compuware Corp.	<i>Compuware Corp. v. IBM Corp.</i> , 2:02-CV-70906-GCS, E.D. Mich. (Mar. 2005)
#3	\$340 million paid by AT&T to settle trade secret, patent, and bankruptcy claims relating to the failed “At Home” broadband business multiple actions settled (May 2005).	Bondholders’ Liquidating Trust	Multiple actions settled (May 2005)
#4	\$290 million paid by Semiconductor Manufacturing International Corp. (SMIC) to settle trade secret, patent, and breach of contract claims stemming from the 2005 settlement (see No. 7),	Taiwan Semiconductor Manufacturing Company (TSMC)	Multiple actions in California Superior Court and China settled (November 2009)
#5	\$288 million paid by Toshiba Corp. in 2006 to settle legal claims including misappropriation of trade secrets and infringement of patents pertaining to Lexar’s NAND flash-memory chips technology in the U.S. Original jury award was for \$465.4 million.	Toshiba Corp.	<i>Lexar Media, Inc. v. Toshiba Corp.</i> , CV-812458, California Superior Court, Santa Clara County (2005)
#6	\$275 million paid by Kolon Industries Inc. to DuPont Co. that included upfront and ongoing payments for trade secrets case involving fiber used to manufacture bulletproof vests and an \$85 million in criminal fines. The jury award was \$919 million. ⁹	E.I. du Pont de Nemours	<i>E.I. du Pont de Nemours & Co. v. Kolon Industries, Inc.</i> , 3:09-CV-00058, U.S. District Court, Eastern District of Virginia (Sept. 2011) – settled in 2015
#7	\$175 million paid by Semiconductor Manufacturing International Corp. (SMIC) to settle trade secret and patent claims.	Taiwan Semiconductor Manufacturing Company (TSMC)	Multiple actions in U.S. District Court, California Superior Court, ITC, and Taiwan District Court settled (January 2005)

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Top 11 Litigation Settlements Involving Trade Secrets
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Rank	Amount	Settlement Payee	Case Name
#8	\$75 million paid by Hilton to settle trade secret, fraud, unfair competition, conversion, and multiple other claims	Starwood Hotels	<i>Starwood Hotels & Resorts Worldwide v. Hilton Hotels Corp.</i> , 09-cv- 03862, S.D.N.Y. (Dec. 2010)
#9	\$75 million paid by A10 in trade secret, patent, and copyright action. The original jury award was \$112 million.	Brocade Communications Systems	<i>Brocade Communications Sys. Inc. v. A10 Networks Inc.</i> , 5:10-cv-03428, N.D. Cal. (Aug. 2012)
#10	\$65 million cash paid by Alnylam Pharmaceuticals, plus \$10 million promised in milestone payments, plus transfer of 150 patents and patent applications to Tekmira, plus royalty streams in future products	Tekmira Pharmaceuticals Corp	<i>Tekmira Pharms. Corp. et al. v. Alnylam Pharms. Inc., et al.</i> , 11-1010-BLS2, Business Litigation Session of the Massachusetts Superior Court (Nov. 2012)
#11	\$61 million paid by Morningstar, Inc.	Business Logic	<i>Business Logic Holdings v. Ibbotson Associates</i> , 2009-CH-46687, Illinois Circuit Court, Cook County Law Division (July 2014)

4. the value of the information to the owner and its competitors;
5. the amount of effort or money expended on developing the information; and
6. the ease or difficulty with which the information could be properly acquired or duplicated by others.¹⁶

Trade secrets are not registered and/or identified with any government agency. Some examples of trade secrets include the following:

- Recipes (e.g., the formula for Coca-Cola soft drinks)
- Manufacturing processes
- Engineering drawings/blueprints/notebooks
- Algorithms (e.g., Google’s search algorithm)
- Measurements
- Test results
- New ideas
- Tools
- Negative information on unsuccessful experiments
- Databases/data compilations/data files
- Customer information
- Supplier information
- Pricing information
- Profit margin information
- IT systems and applications
- Strategic business plans/marketing plans and analyses
- Updates to existing products
- Surveys (e.g., *The New York Times* Best-Seller List)
- Virtual assets
- Other confidential and proprietary business information and know-how

A recent high profile matter involving access of a proprietary database was a case where a couple of employees of the St. Louis Cardinals baseball team were being investigated for accessing into the internal database of the Houston Astros baseball team. The allegations were that they wanted “to steal vital player information from the opposing team, but their motivation was much more vindictive.

“The *New York Times* reported that the hackers’ intent was to despoil the reputations of either

Jeff Luhnnow or Sig Mejdal. Luhnnow was a scouting executive for the Cardinals until 2011 when he accepted a general manager position with their National League rivals, the Astros. Mejdal, a sabermetrics analyst, also left the St. Louis-based team for Houston.”¹⁷

According to reports, “The FBI is still investigating the Cardinals-Astros incident, but initial reports said that Cardinals employees illegally accessed the Astros scouting and personnel database, which was filled with information they deemed to be valuable, they dubbed it ‘Ground Control.’”¹⁸

These types of cybersecurity cases involving theft of trade secrets are increasing with greater frequency in the corporate world.

DEFINITION OF MISAPPROPRIATION

The UTSA states, “For liability to exist under this Act, a Section 1(4) trade secret must exist and either a person’s acquisition of the trade secret, disclosure of the trade secret to others, or use of the trade secret must be improper under Section 1(2).”¹⁹

Misappropriation is defined by the UTSA as:

- (i) acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or
- (ii) disclosure or use of a trade secret of another without express or implied consent by a person who
 - (A) used improper means to acquire knowledge of the trade secret; or
 - (B) at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was
 - (I) derived from or through a person who had utilized improper means to acquire it;
 - (II) acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or
 - (III) derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or
 - (C) before a material change of his [or her] position, knew or had reason to know that it was a trade secret

and that knowledge of it had been acquired by accident or mistake.”²⁰

PLAINTIFF’S REMEDIES IN MISAPPROPRIATION OF TRADE SECRETS MATTERS

The remedies available to a plaintiff include equitable relief (e.g., preliminary injunction or permanent injunction), monetary damages (e.g., compensatory, unjust enrichment, or restitution damages), and legal fees.

According to Section 2(a) of the UTSA:

Actual or threatened misappropriation may be enjoined. Upon application to the court, an injunction shall be terminated when the trade secret has ceased to exist, but the injunction may be continued for an additional reasonable period of time in order to eliminate commercial advantage that otherwise would be derived from the misappropriation.²¹

The UTSA further states that

an injunction should last for as long as is necessary, but no longer than is necessary, to eliminate the commercial advantage or ‘lead time’ with respect to good faith competitors that a person has obtained through misappropriation. Subject to any additional period of restraint necessary to negate lead time, an injunction accordingly should terminate when a former trade secret becomes either generally known to good faith competitors or generally knowable to them because of the lawful availability of products that can be reversed engineered to reveal a trade secret.²²

According to Section 2(b) of the UTSA:

In exceptional circumstances, an injunction may condition future use upon payment of a reasonable royalty for no longer than the period of time for which use could have been prohibited. Exceptional circumstances include, but are not limited to, a material and prejudicial change of position prior to acquiring knowledge or reason to know of misappropriation that renders a prohibited injunction inequitable.²³

According to Section 3(a) of the UTSA:

Damages can include both the actual loss caused by misappropriation and the unjust enrichment caused by misappropriation that is not taken into account in computing actual loss. In lieu of damages measured by any other methods, the damages caused by misappropriation may be measured by imposition of liability for a reasonable royalty for a misappropriator's unauthorized disclosure of use of trade secret.²⁴

The UTSA states that the

reasonable royalty alternative measure of damages for a misappropriator's past conduct under Section 3(a) is readily distinguishable from a Section 2(b) royalty order injunction, which conditions a misappropriator's future ability to use a trade secret upon payment of a reasonable royalty. A Section 2(b) royalty order injunction is appropriate only in exceptional circumstances; whereas a reasonable royalty measure of damages is a general option. Because Section 3(a) damages are awarded for a misappropriator's past conduct and a Section 2(b) royalty order injunction regulates a misappropriator's future conduct, both remedies cannot be awarded for the same conduct. If a royalty order injunction is appropriate because of a person's material and prejudicial change of position prior to having reason to know that a trade secret has been acquired from a misappropriator, damages, moreover, should not be awarded for past conduct that occurred prior to notice that a misappropriated trade secret has been acquired.²⁵

A common goal when calculating actual loss damages in a trade secrets litigation matter is to attempt to make the plaintiff "whole" after experiencing the alleged damages event, which may include the following:

- Profits that the plaintiff would have received but for the defendant's act of misappropriation (including lost sales on convoyed/ancillary products or services that would be sold together with the product or service using the trade secret)
- Plaintiff's increased costs caused by defendant's act of misappropriation
- Value of the trade secrets to the plaintiff as of the date of the misappropriation if they

had been destroyed; otherwise their diminution

- Decline in the value of the plaintiff's business
- Plaintiff's costs of research and development of the trade secret
- Plaintiff's cost to restore the effects of the misappropriation of the trade secret
- Price erosion because the plaintiff had to lower prices to compete with the defendant's use of the trade secret

The *Guide to Intangible Asset Valuation* states:

Compensatory damages are also called actual damages. This is 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 [plaintiff] receives an award of the compensatory damages, then the claimant should be made whole from the effects of the wrongful act.²⁶

The goal of calculating unjust enrichment in a trade secrets litigation matter is to attempt to eliminate the benefit of the unlawful misappropriation of the ill-gotten benefits, profits, or advantages acquired by the defendant, which may include the following:²⁷

- Defendant's profits on sales attributable to use of the trade secrets through increased revenue
- Defendant's saved research and development
- Defendant's time savings and/or acceleration to market
- Defendant's cost efficiencies and increased operating profits
- Defendant's risk reduction and increased business value from lower risk associated with future cash flow
- Value of the trade secrets taken by the defendant as of the date of the misappropriation

According to Section 3(b) of the UTSA:

If willful and malicious misappropriation exists, the court may award exemplary damages in an amount not exceeding twice any award under Subsection 3(a).²⁸

According to Section 4 of the UTSA:

If (i) a claim of misappropriation is made in bad faith, (ii) a motion to terminate a proceeding is made or resisted in bad faith, or (iii) willful and malicious misappropriation exists, the court may award reasonable attorney's fees to the prevailing party.²⁹

According to Section 6 of the UTSA:

An action for misappropriation must be brought within 3 years after the misappropriation is discovered or by the exercise of reasonable diligence should have been discovered.³⁰

The EEA is a federal statute for criminal prosecution of theft of trade secrets. The primary objectives of the EEA are to protect national and economic security.

According to Section 1831 of the EEA, an individual can be sentenced to prison for up to 15 years and receive a criminal fine of up to \$5,000,000, and any organization that commits economic espionage will be fined the greater of \$10,000,000 or three times the value of the stolen trade secret to the organization for economic espionage.

The penalties for commercial trade secret theft include up to a 10-year prison sentence (for an individual) and a fine of up to \$5 million (for an organization).³¹

PLAINTIFF'S LOST PROFITS

The plaintiff's lost profits are calculated first by determining lost revenue and then deducting the incremental costs that would have been incurred in producing the lost revenue.

The American Institute of Certified Public Accountants (AICPA) *Practice Aid 06-4*, titled "Calculating Lost Profits," states the following:

Lost "net" profit is computed, in general, by estimating the gross revenue³² that would have been earned but for the wrongful act reduced by avoided costs. Avoided costs are defined as those incremental costs that were not incurred because of the loss of the revenue.³³

The following methods are generally used to calculate lost revenue:

- *The before and after method.* The analyst compares the before results of operations to the after results of operations

- *The yardstick (or benchmark) method.* The analyst calculates the plaintiff's revenue using a "yardstick" to compare the subject business to other similar businesses, industry averages or other relevant guidelines.
- *The but for (or sales projection) method.* The analyst calculates the plaintiff's expected revenue without the alleged misappropriation of trade secrets in comparison to actual revenue after the harmful event.
- A method based on the terms of the underlying agreement (confidentiality agreement, noncompete agreement, nondisclosure agreement, etc.)

The lost revenue is generally calculated from these models by taking the projected "but for" revenue, minus the plaintiff's actual revenue during the loss period.

The AICPA *Lost Profits Practice Aid 06-4* states the following with regard to the before and after method:³⁴

- "This method compares the plaintiff's performance before the event or action causing lost profits to the plaintiff's performance after that event or action."
- "The plaintiff's prior experience, which can be determined from the plaintiff's historical accounting records, is generally subject to dispute less than other components of the calculation. In addition, the plaintiff's experience subsequent to the defendant's act can be determined, at least up through a date near to the date at which the calculation is made, from the plaintiff's historical accounting records."
- "The practitioner, however, should consider other factors [such as seasonality, unusual/nonrecurring factors, capacity considerations, market share, etc.] that could have affected the plaintiff's level of revenues and demonstrate how those factors have been taken into consideration."

The AICPA *Lost Profits Practice Aid 06-4* states the following with regard to the yardstick method:

- "This method utilizes a 'yardstick' that is used to estimate what the revenues and profits of the affected business would have been. Examples of possible yardsticks that might be employed in the calculation include the following:
 - The performance of the plaintiff at a different location

- The plaintiff's actual experience versus past budgeted results
- The actual experience of a similar business unaffected by the defendant's actions
- Comparable experience and projections by nonparties
- Industry averages
- Pre-litigation projections"
- "When using this method, the practitioner will need to demonstrate the plaintiff's operations are sufficiently comparable to the 'yardstick' used. This could require that the yardstick company be in the same geographic area and/or operates under similar conditions."
- "In addition, as with the 'before and after' method, the practitioner may need to consider other factors that could have caused the plaintiff's performance to differ from the yardstick selected and show how those factors have been taken into consideration."

The underlying theory of lost profits damages calculated using the "but for" method is that "but for" for the defendant's misappropriation of trade secrets, the plaintiff would have received a higher level of revenue and profits.

The "but for" method may consider the following:³⁶

- Company financial projections/budgets/forecasts prepared prior to the harmful event
- Establishing support for the underlying foundation for the company financial projections/budgets/forecasts prepared prior to the harmful event
- The market share that the plaintiff would have attained but for the misappropriation of trade secrets (estimating revenue based on market trends)
- Economic modeling
- Impact of changes in price and volume

The AICPA *Lost Profits Practice Aid 06-4* states the following with regard to calculation based on the terms of the contract that:

In some instances, the lost profits calculation is made in relation to a specific contract. In that instance, many of the elements of the calculation may be set forth in the contract document, i.e., the number



of units to be sold, unit prices, etc. In this situation, a model might be developed that calculates the revenues anticipated under the terms of the contract.³⁷

After determining the amount of lost revenue, the analyst will need to calculate the costs associated with the generation of those lost revenue. In calculating plaintiff's lost profits, profits are generally measured on a contribution margin basis, which is typically measured as lost revenue minus incremental costs.

The AICPA *Lost Profits Practice Aid 06-4* states that, "[t]he costs should be deducted from lost revenues in order to calculate lost profits are generally referred to as avoided costs. *Avoided costs* are those costs that would have been incurred in connection with the generation of the lost revenues but were not incurred."³⁸

Incremental costs are the costs associated with producing the additional number of the "but for" sales volume level.

The analyst can use several methods of cost estimation in his/her analysis of the incremental costs that should be deducted from lost revenue.

Some of the considerations include the following:³⁹

- Analysis of cost structure for cost of goods sold and operating expenses (direct costs and indirect costs) in the determination of fixed versus variable (costs may be fixed, variable, or semivariable)
- Use of nonstatistical methods of cost estimation (account analysis, direct assignment, accounting estimates, cost accounting allocations, ratio analysis, graphical approaches, industrial engineering, etc.) or statistical methods of cost estimation (e.g., regression analysis, attribute sampling, survey data)

The *Guide to Intangible Asset Valuation* states: Incremental expenses should represent only those expenses that were not incurred because the lost revenue was not realized. The most obvious example of an incremental expense is direct production costs. Other examples of incremental expenses that may be deducted from the lost revenue estimate include selling expenses, the variable component of overhead expenses, marketing expenses, advertising expenses, and any royalties that would have been paid on foregone production.⁴⁰

Historical and future lost profits may be calculated in misappropriation of trade secrets matters; however, it is important for the plaintiff's attorney to review the relevant state's statutes and substantive case law for situations in which the analyst is calculating future lost profits. It is also important for the analyst to consider the portion of profits attributable to the trade secret(s).

According to an article published in *Inside Counsel*, "Where the market is damaged due to defendant's disclosure of the trade secret, the plaintiff may also recover certain provable future profits based on historical data or the fair market value of the trade secret if the defendant had disclosed the trade secret publicly."⁴²

There are some states that limit the loss period to a "head-start" period. There are also situations in which a court may award the monetary damages to compensation for the defendant's past use of the trade secret in addition to a permanent injunction to prevent the defendant's future use of the trade secret.

Both an award of future lost profits and permanent injunction may be considered an impermissible double recovery.⁴³

A risk-adjusted discount rate is applied to the plaintiff's future lost profits. The discount rate includes a component for the time value of money (inflation) and risk inherent in future lost profits. The future lost profits are generally discounted back to the date of the misappropriation of trade secrets or the current date (such as date of report or trial).⁴⁴

The discount rate should include an analysis of the risk of the misappropriated trade secret(s).

DEFENDANT'S PROFITS

AICPA *Practice Aid 06-4*, titled "Calculating Lost Profits," states:

In certain situations, such as cases involving unfair competition or the misappropriation of trade secrets, an accounting of the profits realized by the defendant may be used as the measure of the plaintiff's lost profits. In obtaining an accounting of the defendant's profits, the plaintiff is only entitled to receive value of the unjust enrichment of the defendant through disgorgement, i.e., the defendant is required to surrender profits attributable to the misappropriation or bad act to the plaintiff. To the extent that profits are attributable to other factors, the defendant would not have to disgorge those amounts. In some jurisdictions (and for some causes of action), the plaintiff only has the burden to identify the revenues associated whereas the defendant has the burden to prove both the costs incurred in generating the revenues as well as apportioning the profits between the misappropriation and other profit generators.⁴⁵

The UTSA states: "As long as there is no double counting, Section 3(a) adopts the principle of the recent cases allowing recovery of both a complainant's actual losses and a misappropriator's unjust benefit that are caused by misappropriation."⁴⁶ Thus, the analyst cannot use the same lost sales for calculating plaintiff's lost profits and unjust enrichment of defendant's profits.

The plaintiff typically has the burden of proving the defendant's revenue and then the defendant generally has the burden to prove deductions and offsets from revenue. Typically, the misappropriator will need to prove that the expense item was paid and it was attributable to the sales using the misappropriated trade secrets.

Certain allowable deductions may include the costs of materials, services, and labor incurred in producing the goods or services; insurance premiums; building repairs; allocated percentages of overhead costs; and selling, marketing, and advertising costs.

There are some jurisdictional differences on which expenses can be deducted from revenue. It is important for the plaintiff's attorney to review the relevant state's statutes and substantive case law for situations in which the analyst is calculating an accounting of the defendant's profits to determine which expenses should be deducted from revenue.

In general, a plaintiff's lost profits calculation subtracts incremental expenses from revenue; whereas, an accounting of the defendant's profits may be calculated by either:

1. subtracting incremental expenses from revenue or
2. subtracting fully allocated expenses (incremental and fixed expenses) from revenue.

For example, U.S. courts are split on the issue of overhead allocation in an accounting on the defendant's profits for an unjust enrichment calculation.^{47,48}

It is important for the plaintiff's attorney to review the relevant state's statutes and substantive case law for situations in which the analyst is calculating future unjust enrichment for defendant's profits.

According to a recent Business Valuation Resources program titled "Measuring Unjust Enrichment," "Future unjust enrichment is becoming more common."⁴⁹

VALUATION OF TRADE SECRETS

In misappropriation of trade secret cases, the standard of value usually is a fair market value type standard based on what a reasonable investor would have paid for the trade secrets.

Fair market value is defined by the American Society of Appraisers (ASA) Business Valuation Standards Glossary as "the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts."⁵⁰

There are three generally accepted approaches to valuing trade secrets:

- **Cost approach.** The cost approach is based on the economic principle of substitution. The general principle of the cost approach is that a prudent investor would pay no more for a trade secret than the cost necessary to replace and/or protect the trade secret. The value of the trade secret is determined by aggregating the costs involved in its development.
- **Market approach.** The market approach is based on an analysis of trade secret acquisition transactions or trade secret licenses to value the subject trade secret(s).



- **Income approach.** The income approach is used to estimate a value of a trade secret if the trade secret produces any measure of either operating income or license income.

There are four general cost components that generally should be considered in the cost approach analysis to value a trade secret:

1. **Direct costs.** "Direct costs include material, labor, and overhead costs incurred directly by the intangible asset creator."⁵¹
2. **Indirect costs.** "Indirect costs may also include material, labor, and overhead costs. In this case, these costs are incurred directly by the creator. . . . The indirect costs are, of course, ultimately paid by the intangible asset creator. These costs are paid to individuals and organizations that are outside of the inventor's organization."⁵²
3. **Developer's profit.** "First, from the perspective of the developer of any intangible asset, the developer expects a return of all of the direct and indirect costs (including material, labor, and overhead costs) related to the development process. Second, the developer expects a return on all of the direct and indirect costs (including material, labor, and overhead costs) related to the development process."⁵³
4. **Entrepreneurial incentive.** "The entrepreneurial incentive is the amount of economic benefit required to motivate the intangible asset creator to enter into the development process. From the perspective of the

creator, entrepreneurial incentive is often perceived as an opportunity cost.”⁵⁴

Below is a list of items to consider when using a cost approach to value trade secrets:

- The cost approach is sometimes used in situations when the trade secret does not generate an income stream or there is no guideline trade secret acquisition transaction or license market data.
- Reproduction cost is the level of expenditures needed to reproduce an exact replica of the asset.
- Replacement cost is the level of expenditures necessary to develop an asset with similar utility.
- Value = Replacement cost new – physical deterioration – economic obsolescence – curable functional and technologies obsolescence.
- The conclusion under the cost approach may not reflect the value of the trade secret to its owner.
- The cost approach is sometime used to calculate the floor value of the subject trade secret.

The most common methods to value trade secrets using a market approach include the following:

1. Sale comparison method. This method relies on guideline acquisition transaction data of trade secrets.
2. Relief from royalty method. This method relies on guideline license transaction data of trade secrets. The royalty rate is generally applied to the trade secret owner’s revenue or financial metric to estimate the trade secret value. This method is considered a hybrid market and income approach.

The hypothetical royalty payment should reflect the amount that an operator or licensee would be willing to pay in an arm’s-length transaction to a third-party owner or licensor in order to obtain the use of the trade secret.

Other royalty considerations may include changes in parties’ competitive positions, nature and extent of use by defendant, availability of alternative trade secrets, and so on.

A market approach is rarely used to value trade secrets because of very limited acquisition and license transactions and the difficulty of comparing one trade secret to another trade secret.

Trade secrets by their very nature are unique and secret. It is important for the analyst to adjust for differences in the trade secret transaction data and the subject trade secret.

It is very difficult to find a large data set of guideline licensing data to value trade secrets. Additionally, many times license agreements for trade secrets are bundled with patent license agreements or other intellectual property agreements.

In situations involving bundled license agreements, the analyst will generally need to apportion the total value among the various intellectual properties included in the license agreement.

There are three primary components of an income approach used to value a trade secret:

1. Projected amount of income attributable to trade secrets
2. Duration of the income projection period – remaining useful life of the trade secret
3. Income capitalization rate (discount rate minus growth rate)

The following discussion presents a summary of income approach valuation methods that can be relied upon to value trade secrets:

1. Valuation method that quantifies an incremental amount of revenue or a decremental amount of cost (also known as with-and-without method).

In this method, “(a) the owner/operator will generate a greater amount of revenue by owning or operating the intangible asset compared to not owning or operating the intangible asset or (b) the owner/operator will experience a lower amount of cost by owning or operating the intangible asset compared to not owning or operating the asset. The owner/operator revenue could increase because the intangible asset results in new products, new customers, an increased market share, an increased total market, increased units sold, increased unit selling price, decreased products and so on. The owner/operator operating cost could decrease because the intangible assets results in decreased production cost, decreased selling expense, decreased administrative

expense, decreased research and development expense, or decreased interest expense.”⁵⁵

It is important that the benefits of the trade secret are the only difference in both scenarios.

2. Valuation method that relies on a hypothetical agreement that the owner and the operator will share (or split) the expected profits associated with the commercial exploitation of the trade secret (also known as profit-split method).

“That is, the owner and the operator agree to split the total business profit (often measured as earnings before interest and taxes) related to the intangible asset commercialization. Another way to conceptualize the profit split category of valuation methods is that the owner provides the intangible asset and the operator provides the working capital assets, the tangible personal property and real estate assets, and the routine intangible assets used in the business. Each party (the owner and the operator) receives a split of the total business operating profit commensurate with their relative contribution to that business.”⁵⁶

This method is somewhat similar to the relief from royalty market method. The primary difference is the derivation of the royalty rate.

3. Valuation method that relies on a differential level of income.

“The phrase *differential level of income* simply means the difference in the amount of income. That is, these methods compare the owner/operator using the intangible asset to a benchmark income measure. The benchmark income measure would be (a) the owner/operator income without the intangible asset, (b) the owner/operator income using a prior generator of the intangible asset, (c) an industry average level of profitability, (d) a level of profitability earned by identified guideline companies, or (e) some other benchmark income measure. The differential income measure does not necessarily have to be owner/operator operating income, net income, or net cash flow. Rather, the differential income could be measured by the difference in just about any owner/operator financial fundamental.”⁵⁷

4. Residual income methods that typically start with the owner/operator’s total business income.

“In applying these methods, the analyst identifies all of the owner/operator contributory assets. Contributory assets are all of the other assets—other than the actual intangible asset—that are used to produce the owner/operator income. Next, the analyst applies a fair rate of return on investment to each of the contributory asset categories. Typical contributory asset categories include net working capital assets, real estate and tangible personal property assets, and routine intangible assets (like, intangible assets other than the subject intangible asset). The analyst multiplies the fair rate of return by the value of each contributory asset category to conclude a contributory asset charge. The total business income less than the total contributory asset charge equals the residual (sometimes called *excess*) return. The residual income is the amount of owner/operator’s income associated with the intangible asset.”⁵⁸

These methods are generally used in situations in which the trade secret is the primary driver of cash flow.

Another important test for the analyst to consider is the value of the trade secret(s) in relation to the overall enterprise value of the company. This can be especially relevant in situations when there are multiple trade secrets held by the plaintiff.

REASONABLE ROYALTY

In situations in which the damages cannot be calculated based on plaintiff’s actual loss or defendant’s unjust enrichment, a reasonable royalty can be used to calculate damages caused by the misappropriation of trade secrets. A reasonable royalty damages calculation is used relatively less frequently than plaintiff’s actual or defendant’s unjust enrichment in misappropriation of trade secrets cases.

The reasonable royalty rate method generally calculates what a third-party licensor would pay to a third-party licensee for an arm’s-length use license related to the misappropriated trade secret(s).

Additionally, the royalty rate may be based on documentation between the parties (which shows the value that the parties placed on the misappropriated trade secrets) or other existing licensing agreements with other third parties for the trade secrets.

The *Guide to Intangible Asset Valuation* states:

The reasonable royalty rate method models the scenario in which the respondent approaches the owner/operator in good faith and negotiates an arm's-length license for the lawful use of the intangible asset [trade secret]. The principle supporting this method is that the licensee would be willing to pay a fair royalty rate for the inbound license of the claimant's intangible asset and the licensor would be willing to accept a fair royalty rate for the outbound license of the claimant's intangible asset.⁵⁹

In comparison to other types of intellectual property (patents, copyrights, and trademarks), there are significantly fewer licensing agreements pertaining to trade secrets. Additionally, analysts may consider the factors used to determine reasonable royalty from patent infringement case law, which is well-developed.

A reasonable royalty considers both the royalty base and the royalty rate. A royalty rate can generally be based as a percentage of gross revenue, percentage of net revenue, percentage of cost savings, per unit, lump sum, or some other basis agreed to by the parties. Trade secrets are generally licensed either on an individual stand-alone basis, or as a component of a patent or a broader intellectual property license agreement.

There are several sources of royalty rate data, which include the following:⁶⁰

- ktMINE (www.ktmine.com)
- RoyaltySource (www.royaltysource.com)
- RoyaltyStat (www.royaltystat.com)
- Consor (www.consor.com)
- MARKABLES (www.markables.net)
- *Licensing Economic Review*
- *Licensing Royalty Rates* published by Wolters Kluwer and authored by Gregory J. Battersby and Charles W. Grimes

Below is a summary of royalty rate methods used to calculate a reasonable royalty rate in misappropriation of trade secrets matters:

1. *Incremental profit method*. "Using a weighted average cost of capital analysis, the analyst compares the owner/operator to other companies in the marketplace that don't own the intangible asset. The investment method considers the expected return (profits) from all of the company assets (including both tangible assets and

intangible assets), including the infringed intangible asset. A weighted average return on assets (based on the returns of other companies) is applied to the assets of the alleged infringing company. This results in an estimate of the profits that the company would earn if it did not utilize the infringed intangible asset. This profits measure (in other words, as if no infringement event occurred) is then compared to the actual profits of the infringing company. This comparison results in a measure of the incremental profits from the alleged infringement. This measure of infringement-related incremental profits can then be used to estimate a reasonable royalty rate."⁶¹

2. *Differential income method*. "The analyst uses a discounted cash flow analysis in which the analyst prepares two alternative cash flow projections. The first cash flow projection is prepared to reflect the owner/operator's prospective results of operations with the effects of the damages event. The second cash flow projection is prepared to reflect the owner/operator's prospective results of operation without the effects of the damages event. The difference between these two discounted cash flow analyses indicates the damages amount. The differential income (that is, the difference between the two cash flow analyses) is divided by the owner/operator's annual revenue to estimate a reasonable royalty rate."⁶²
3. *Comparable uncontrolled transaction method*. "This analysis compares the intangible asset to third-party comparable uncontrolled transaction involving the license of similar intangible assets. This market-derived, third-party license royalty rate analysis considers factors such as:
 - the relevant time period of the third-party licenses,
 - the financial condition of both licensor and licensee parties,
 - the exclusivity of the license,
 - any relevant government regulations,
 - any nonmonetary compensation included in the license, and
 - the [remaining useful life] RUL of the licensed intangible asset."⁶³
4. *Comparable profit margin method (also known as the analytical method)*. "A reasonable royalty rate can be based on the

expected (or historical) profit margin of the owner/operator company compared to a normal profit margin (based on guideline companies operating in the same or similar industry that do not use a comparative intangible asset).⁶⁴

In the matter of *Sabatino Bianco, M.D. v. Globus Medical, Inc.*,⁶⁵ the court set an ongoing royalty rate of 5 percent on defendant's future sales for a maximum of 15 years.

Despite the defendant's argument that any "head start" it received had dissipated before trial so an ongoing royalty should not apply, the court reasoned that defendant failed to present evidence regarding its "head start" theory at trial, so this was no basis to dispute the ongoing royalties.

The court noted that this was a proceeding to set the ongoing royalty rate so the jury's verdict was the proper starting point for making the determination of ongoing royalties." This decision was affirmed by the federal circuit.

This case involved a doctor who was awarded \$4.3 million and future royalties in connection with three misappropriated trade secrets involving the company's top-selling spinal fusion devices.^{66,67}

DEFENDANT'S REBUTTAL STRATEGIES FOR DAMAGES CALCULATIONS

Below is a list of certain defendant rebuttal strategies that an analyst should consider:

- The plaintiff has not proved that its damages were caused by defendant's misappropriation of trade secrets—no nexus between the misappropriation of trade secrets and the actual loss.⁶⁸
- The damages amounts claimed or portions thereof, are unrelated to the alleged trade secret misappropriation.⁶⁹
- The loss period for damages for the time it would have taken to independently develop the trade secret or reverse engineer the trade secret is reduced.⁷⁰
- Some portion of the damages is comprised of an impermissible double-recovery.⁷¹
- Defendant did not use the trade secret information (an example may include the doctrine of inevitable disclosure—inevitable disclosure is an inference that the former employee will inevitably use former employer's trade secrets in carrying out the

same duties for a new employer—state laws vary significantly on these issues).⁷²

- Whether the plaintiff has not adequately defined/identified its trade secrets.⁷³
- The plaintiff only included a damages model based on misappropriation of all of the trade secrets and failed to apportion damages among trade secrets or other legal claims.⁷⁴
- Alleged trade secret information is already in public domain and knowledge through public disclosure is not due to any act of the defendant.⁷⁵
- Alleged trade secret information was independently developed by defendant without access to the trade secret information.⁷⁶
- Alleged trade secret information was not kept secret in confidence and treated as confidential.⁷⁷
- Alleged trade secret information can be easily reversed engineered.⁷⁸
- Alleged trade secret information does not provide competitive advantage.
- Losses to the business were caused by changes in consumer demand for a product or service incorporating the trade secret or noninfringing alternative products.
- Plaintiff's damages do not meet the test of reasonable certainty for recovery of damages.
- Plaintiff did not indicate to employees, vendors, suppliers, consultants, etc. that certain information and/or know-how was considered to be a trade secret.
- The economic remaining useful life of the trade secret is lower than the period asserted by the plaintiff.

PROPOSED DEFEND TRADE SECRETS ACT OF 2015 (DTSA)

The House and Senate each proposed identical legislation (H.R. 3326 and Senate Bill 1890) titled the "Defend Trade Secrets Act of 2015" (DTSA). This proposed act would create a federal private right of action for misappropriation of trade secrets cases. In addition:

The proposed legislation attempts to authorize a private civil action in federal court for the misappropriation of a trade secret that is related to a product or service used in, or intended for use in, interstate or foreign commerce. Additionally, the proposed

legislations seeks to (a) create a uniform standard for trade secret misappropriation; (b) provide parties pathways to injunctive relief and compensatory damages; and (c) create remedies for trade secret misappropriation that are similar to other violations of intellectual property rights, for example, including exemplary damages and attorneys' fees available in the event of willful and malicious misappropriation of a trade secret. An interesting feature of the DTSA 2015 is the availability of an ex parte seizure order for plaintiffs fearful of the dissemination of their trade secret(s). The proposed ex parte seizure allows for the government to seize property necessary to prevent the propagation or dissemination of the trade secret prior to giving notice of the lawsuit to the defendant.⁷⁹

The DTSA also differs from the USTA on the following items:⁸⁰

- Statute of limitations period is increased to five years from three years
- Allows for recovery of treble exemplary damages versus double
- Allows for an ex parte seizure order, which allows for a plaintiff to take proactive steps to have the government seize its trade secrets prior to giving notice to the defendant (which goes far beyond what a court is willing to do under existing state law)

CONCLUSION

Trade secrets litigation is on the rise and will continue to increase in the future. There are a lot of approaches to calculating damages in a misappropriation of trade secrets litigation matter. It is important that the analyst use a damages remedy that relates to the facts and circumstances of the case and be flexible in his/her approach to calculating damages.

In addition, there are significant differences in state law, and the analyst should work with counsel to review relevant state statutes and case law in the jurisdiction that applies to the case.

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27. “Trade Secret—Value and Damages Considerations,” OverMont Consulting, LLC (September 6, 2012).
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