

THE INVENTORY COMPUTATION AND PROFIT AND LOSS EXCLUSION: SEPARATING THE WHEAT FROM THE CHAFF

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I. Introduction

It is axiomatic that insurers want to pay only for loss resulting from a covered peril. In Employee Dishonesty coverage, the peril is fraudulent or dishonest acts, as defined in the coverage form, committed by an employee. It is equally axiomatic that a shortage of inventory can occur from causes other than fraudulent or dishonest acts committed by an employee. For example, failure to verify quantities received or shipped, waste or spoilage, theft by someone other than an employee (shoplifting or burglary), inaccurate record-keeping, and inventory record-keeping methodologies can all cause a shortage of inventory.

Commentators on the subject have cited studies identifying more than a hundred causes, other than dishonest or fraudulent acts by an employee, which either physically or theoretically can produce inventory shortages.¹

Insurers have sought to separate the wheat – that part of an inventory shortage due to employee dishonesty – from the chaff – that part of an inventory shortage due to other causes. This article addresses this challenge. Section II reviews the relevant policy provisions and the case law interpreting those provisions. Section III provides an accountant's perspective on the difference between enumeration and inventory computation, as well as a discussion of inventory processes. Section IV provides a sample case study of an inventory computation and possible alternative method of loss calculation.

II. Overview of The Case Law

A. INTRODUCTION

Courts have recognized that inventory shortages can be due to causes other than dishonest or fraudulent acts by an employee. In upholding a directed verdict for

¹ James E. Chelberg, *The Inventory Computation Exclusion—The Latest View*, FORUM, (Summer 1980) (citing _____ Komoroff, *Fidelity Claims Require Further Proof Than Bookkeeper's Inventory Computations*, THE INDEP. ADJUSTER (Spring 1962) and _____ Keech, *The Inventory Shortage Problem—A Home Office Point of View* (Proceedings of the ABA Insurance, Negligence and Compensation Law Section (_____, 1963)).

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the insurer, where the insured's evidence consisted only of inventory shortages, the Fifth Circuit stated as follows:

The fact that the plaintiffs showed inventory shortages from time to time in eight of their stores was not enough to establish that such shortages were due to dishonesty of an employee or employees. *Under the bookkeeping system used by the plaintiffs, shortages would be reflected by any number of things other than dishonest conduct of employees.*²

In *American Thermostat Corp. v. Aetna Casualty and Surety Co.*,³ the insured claimed a loss of \$123,000 worth of silver points and \$125 worth of brass points, but the employee confessed to taking only \$1,600 of silver points, which were recovered, and the brass points. Accordingly, the court upheld a judgment for the insured, in the amount of \$125, stating:

By its specific terms, the insurance policy clearly and explicitly states that it does not apply to losses “the proof of which . . . is dependent upon an inventory computation or a profit and loss computation” unless the insured can otherwise establish its loss “through evidence wholly apart from such computations.” *There being so many factors aside from employee dishonesty which can affect such computations, it is readily understandable why such a clause was inserted in the policy.*⁴

Every insurer presented with a claim for loss allegedly due to employee dishonesty that involves a shortage of inventory is thus faced with the problem of separating the wheat from the chaff. Over time insurers have attempted to resolve this problem with three different solutions:

1. A requirement in the insuring agreement that there must be conclusive proof that the loss was due to employee dishonesty if the loss involved a shortage of inventory (Conclusive Proof Standard);
2. Exclusion of inventory and profit and loss computations with an exception for loss that the insured can prove by evidence wholly apart from such computation was sustained through fraudulent or dishonest acts by an employee (Exclusion With Exception); and
3. Exclusion of loss dependent as to its existence or amount on an inventory computation or a profit and loss computation (Absolute Exclusion).

² *Cobb v. Am. Bonding Co. of Baltimore*, 118 F.2d 643, 644 (5th Cir. 1941)(emphasis added).

³ 399 N.Y.S.2d 292 (N.Y. 1977), *appeal denied*, 374 N.E.2d 398 (1978).

⁴ *Id.* at 293 (emphasis added).

B. CASES UNDER THE CONCLUSIVE PROOF STANDARD

The first approach to solving the problem of determining what portion of an inventory shortage is due to the covered peril of employee dishonesty and what portion is due to other causes was an attempt to require a higher standard of proof that the loss was due to employee dishonesty if the loss involved an inventory shortage. The Fifth Circuit addressed this issue: “By the terms of the contract, recovery was to be allowed for ‘that part of any inventory shortage which the Insured shall *conclusively* prove is caused by the dishonesty of any Employee or Employees.’”⁵ Likewise, the Mississippi Supreme Court commented on similar language in a fidelity blanket position bond, which provided coverage and indemnity for both companies “‘against any loss of money or other property, real or personal, (including that part of any inventory shortage which the insured shall *conclusively* prove has been caused by the dishonesty of any employee or employees).’”⁶

The plaintiffs in *Cobb v. American Bonding Co. of Baltimore*⁷ owned several liquor stores. Periodic inventory checks over a seven-month time span revealed shortages at eight stores but also revealed some overages. The Fifth Circuit opinion does not indicate that any employee was caught stealing inventory, and a claim may have been made for dishonest or fraudulent acts by unidentified employees. Judgment was entered for the insurer, and the plaintiff appealed, contending the contractual provision requiring conclusive proof was invalid. The Fifth Circuit did not rule on whether the contractual provision was invalid but upheld the judgment, stating:

Viewing all the evidence in the light most favorable to the plaintiffs it, at most, creates no more than a surmise or suspicion that some of the shortage reflected by the inventories might have been due to dishonesty on the part of an employer or employees. Verdicts may not rest upon guess or conjecture, and where, as here, the probative force of all the evidence of the plaintiff does not go beyond the point of creating a mere surmise or suspicion, it becomes the duty of the trial court to instruct a verdict for the defendant.⁸

In *Gaytime Frock Co. v. Liberty Mutual Insurance Co.*,⁹ the plaintiff operated women’s apparel shops in several cities. It sued to recover for loss allegedly due to

⁵ *Cobb*, 118 F.2d at 643 (emphasis added).

⁶ *Hartford Acc. & Indem. Co. of Hartford v. Hattiesburg Hardware Stores*, 49 So. 2d 813 (Miss. 1951) (emphasis added). See also *Sucher Packing Co. v. Mfrs. Cas. Ins. Co.*, 245 F.2d 513 (6th Cir. 1957); *Leader Clothing Co. v. Fid. & Cas. Co. of New York*, 237 F.2d 8, 9 (10th Cir. 1956); *New Amsterdam Cas. Co. v. W.D. Felder & Co.*, 214 F.2d 825 (5th Cir. 1954); *Morrow Retail Stores, Inc. v. Hartford Acc. & Indem. Co.*, 111 F. Supp. 722 (D. Idaho 1953); *Nat’l Shirt & Hat Shops of Carolinas v. Am. Motorists Ins. Co.*, 68 S.E.2d 824, 825 (N.C. 1952).

⁷ *Cobb*, 118 F.2d at 643 (5th Cir. 1941).

⁸ *Id.* at 644.

⁹ 148 F.2d 694 (7th Cir. 1945).

employee dishonesty at five of its shops. At trial the plaintiff offered evidence of its daily inventory, bookkeeping, and general controls. It also introduced evidence of measures it had taken to prevent burglary and shoplifting. The plaintiff then introduced evidence of inventories taken on certain dates, revealing shortages in specified dollar amounts and offered to introduce evidence of what constitutes normal shrinkage at the locations. In addition, evidence was introduced indicating a salesperson counted thirty-nine dresses in a locked storage area. While counting the dresses, the salesperson noticed another employee just outside the locked storage area. After completing the count, the salesperson locked the door and placed the key on the manager's desk. A few minutes later, the salesperson noticed that the door was unlocked and all the dresses were missing. The employee noticed by the salesperson was charged with the theft but was found not guilty. Judgment was entered for the insurer; and the plaintiff appealed. Citing *Cobb*, the appellate court upheld judgment for the insurer, stating as follows:

To be sure, the fact that the shortages were caused by the dishonesty of plaintiff's employee or employees may be established by circumstantial evidence, but the evidence to establish that fact must be of such a nature that it is the only conclusion that can fairly or reasonably be drawn, that is to say, such evidence must fairly and reasonably exclude any other explanation.¹⁰

In *Hartford Accident & Indemnity Co. of Hartford v. Hattiesburg Hardware Stores*,¹¹ the plaintiff made claim for loss allegedly due to employee dishonesty, by the manager of its butane gas facility, for nine separate items. Only the last two, 1,550 gallons of butane gas and 28 butane gas tanks, involved inventory shortages. As for the butane gas, a delivery driver testified that he observed a delivery truck that did not belong to the plaintiff near the facility as he drove in to fill his truck. He further testified that he observed the manager and another employee who worked in the repair department at the loading facility and that the manager gave him the record book, in which withdrawals of gas were to be recorded, with a variance of 1,550 gallons from the preceding page. The employee from the repair department testified the meter on the storage tank was malfunctioning and that he and the manager had just finished cleaning and repairing it. Thus, the discrepancy resulted from the cleaning and repair of the meter. As for the butane tanks, the evidence showed that the tanks were kept in a vacant lot with no security system. At the conclusion of the trial, the court granted the defendant's motion for a peremptory verdict as to items eight and nine. The Mississippi Supreme Court upheld the peremptory verdict instruction as to items eight and nine, noting the proof offered failed to establish any shortage of butane gas or to connect the manager to the disappearance of the butane tanks.¹²

¹⁰ *Gaytime Frock Co.*, 148 F.2d at 695.

¹¹ 49 So. 2d 813 (Miss. 1951).

¹² *Id.* at 822-23.

The preceding cases suggest that policies with language requiring a standard of Conclusive Proof of employee dishonesty where the loss involved inventory shortages were achieving the intended purpose of not covering inventory shortages due to a cause other than employee dishonesty. Other cases suggest just the opposite.

The plaintiff in *National Shirt & Hat Shops of Carolinas v. American Motorists Insurance Co.*¹³ brought suit to recover for an inventory shortage of clothing from one of its stores. The accused employee was the manager of the store. After denial of defendant's motions for nonsuit and after a jury verdict in favor of the plaintiff, the defendant appealed, challenging the denial of the motions for nonsuit. The North Carolina Supreme Court upheld the denial of the motions for nonsuit and the verdict on the grounds that the evidence, when considered most favorably to the plaintiff, was sufficient to warrant submission of the case to the jury.¹⁴

Evidence was introduced with regard to the plaintiff's perpetual inventory system, in which it was the manager's responsibility to record receipt of all merchandise, to compare daily sales tickets from the cash register on which sales clerks were to have written the article sold to the inventory record, and to subtract the items sold. The manager was instructed to send a copy of the inventory record each week, which was done, and to take a physical inventory every two weeks, which was not done. Previous inventories had revealed normal shortages and overages. There was conflicting evidence as to whether the manager had been instructed to maintain all cash register receipts to compare to inventory and as to whether he had offered to repay the amount of the shortage.¹⁵

The issue on appeal was whether the plaintiff had met the requirement of the bond as to conclusive proof of loss caused by the dishonesty of an employee sufficient to overcome the defendant's motion for nonsuit. The court stated:

However, it is not contended that the purpose of the bond with respect to the conclusiveness of proof as to an inventory shortage was designed for or could have the effect of altering, modifying, or enlarging the rules of evidence. We think the contention is without merit. It is settled with us that in a civil action containing an issue including a criminal charge, the party required to carry the burden of proof is only required to do so by a preponderance of the evidence or by its greater weight.¹⁶

In short, the court held that where the loss involved a shortage of inventory, the insured need only show by the greater weight of evidence that the loss was due to

¹³ 68 S.E.2d 824 (N.C. 1952).

¹⁴ *Id.* at 828.

¹⁵ *Id.* at 826.

¹⁶ *Id.* at 829 (citations omitted).

employee dishonesty as opposed to showing beyond any reasonable doubt the loss was caused by employee dishonesty.

The court in *Morrow Retail Stores, Inc., v. Hartford Accident & Indemnity Co.*¹⁷ did not address the issue of conclusive proof from the standpoint of the rules of evidence but instead determined that the words should be given a reasonable construction consistent with the purpose of the contract.¹⁸ The plaintiff sued to recover under a fidelity bond for an inventory shortage in two departments at one store, which were managed by the same person. The manager had resigned suddenly without explanation just prior to the discovery of the shortage.

At trial the plaintiff introduced evidence that a physical inventory was taken at the start of each accounting period and priced at retail value. Purchases were then added to reflect retail price (cost plus markup), and sales were subtracted together with markdowns in retail price and spoilage. The plaintiff acknowledged that there inevitably were shortages that represented bookkeeping errors, errors in inventory taking, unreported markdowns and spoilage, and losses due to customer theft. The plaintiff reduced its claim by an amount it attributed to these factors other than employee dishonesty.¹⁹ The plaintiff also submitted testimony from a CPA as an expert witness that the loss was due to dishonest acts by an employee; whereas the defendant offered no expert testimony to the contrary. In granting judgment to the plaintiff, the court stated as follows:

Here, if the assured is to be held to the high degree of proof, which defendant argues should be required, the insurance coverage of inventory shortage, caused by dishonest acts of unknown employees, would be practically valueless. Manifestly, it would be out of the question for the assured to prove incontrovertibly, or beyond the possibility of error, that a shortage of merchandise, disclosed by the taking of a physical inventory, was due to the dishonesty of some employee in a situation where the identity of the culprit was unknown to the assured.²⁰

In *New Amsterdam Casualty Co. v. W.D. Felder & Co.*,²¹ the insured, W.D. Felder & Co., brought suit in federal district court to recover for theft of cotton samples by two employees. The insurer appealed from a judgment against it, contending the evidence did not conclusively show a loss caused by employee dishonesty. The cotton samples shipped to the insured were measured by weight upon shipment. Cotton samples taken from local purchases were calculated at a reduced weight from samples normally taken from a bale. After the samples were no longer needed, they were to be stored in a locked area for later sale or shipment to be

¹⁷ 111 F. Supp. 772 (D. Idaho 1953).

¹⁸ *Id.* at 774.

¹⁹ *Id.* at 773.

²⁰ *Id.* at 774.

²¹ 215 F.2d 825 (5th Cir. 1954).

re-ginned. Two employees were caught stealing cotton samples. The insured then calculated the total weight of samples received, plus the total weight of samples taken from local purchases, subtracted the weight of cotton samples sold or shipped to be re-ginned, and claimed the difference as loss due to employee dishonesty. The Fifth Circuit upheld the verdict in favor of the insured, stating simply that "[u]nder the circumstances we think the evidence as to the cause of loss was sufficient."²²

*Leader Clothing Co. v. Fidelity & Casualty Co. of N.Y.*²³ is another case where the court concludes that the conclusive proof requirement is met by a preponderance of evidence reasonably establishing the cause of loss. The plaintiff clothing store sued to recover for a loss of \$24,861.06 allegedly due to employee dishonesty by two employees. The policy limited coverage for loss due to any one employee to \$15,000. The policy provided that, in the case of inventory loss, the insured must conclusively establish that the loss was due to the fraud or dishonesty of the employee. Two employees were apparently caught stealing clothing from the store; at least one of them admitted to having stolen merchandise. An audit by the insured determined an inventory shortage in excess of \$24,000. An accountant hired by the insured also reviewed the insured's books and records for the period and determined that the insured had suffered a loss between \$20,298.19 and \$27,510.91 due to theft by the two employees. The opinion indicates that the accountant used three different methods to calculate a loss amount, each of which produced a different result.²⁴

The court appointed a special master, who took extensive testimony, and then awarded the insured the policy limit of \$15,000 for loss due to employee dishonesty by one of the employees and \$9,728.24 for loss due to employee dishonesty by the other employee. The trial court rejected in part, accepted in part, and modified in part the special master's findings and awarded the insured a judgment of \$10,000. Both sides appealed. The Tenth Circuit determined that the insured had not met the burden of proof to show it was entitled to more than a single policy limit but had met the burden of proof that it had sustained a loss due to employee dishonesty sufficient to entitle it to judgment in the amount of the policy limit of \$15,000. The court stated:

When it is once established with certainty that a loss covered by the policy has occurred, it is not necessary to a recovery that the amount must be proved with mathematical accuracy, where that is impossible. Where, as here, the amount of damages is difficult of ascertainment, as said by the Supreme Court, it would be a perversion

²² *Id.* at 827.

²³ 237 F.2d 7 (10th Cir. 1956).

²⁴ *Id.* at 10. Those three methods used by the accountant are as follows: (1) total retail sales, less markdowns, which was then adjusted for the normal 40% markup; (2) average cost of inventory based upon purchases, less returns and transfers, divided by units of inventory, multiplied by the quantity of missing units; and (3) gross profit whereby gross profit for a similar time period the preceding year was compared to gross profit for the period in question, with the decline attributed to theft by employees.

of justice to deny all relief to the injured person under such circumstances. It is enough if there is a basis for a reasonable inference as to the extent of the damages.²⁵

Although the verdict was favorable to the insurer in *Sucher Packing Co. v. Manufacturers Casualty Insurance Co.*,²⁶ the court still considered the language of the bond requiring conclusive proof of employee dishonesty for any inventory shortage to require only a preponderance of the evidence sufficient to reasonably determine the amount of loss due to employee dishonesty. The loss was discovered when the plant superintendent noticed a new barrel loaded on a trash truck. He proceeded to inspect the barrel and found several smoked hams under some trash in the barrel. The driver of the trash truck, not an employee, admitted to the theft and accused four employees of the insured of participating in the thefts, one of whom was arrested and pleaded guilty.

The plaintiff brought suit in federal district court seeking to recover \$146,370.57 under a policy with a \$20,000 limit by claiming the limit for five employees and the balance for unidentified employees over a five-year period. The jury awarded \$83 based upon an admission by the insurer of a covered loss of \$291, less \$208 recovered. There was contradictory evidence from the employee, who pleaded guilty as to the length of time he had been stealing, having stated upon his arrest it was only for three weeks, but testifying at trial it was for two years.²⁷ The opinion indicates the insurer's accountant testified that there were numerous unaccounted for inventory shortages at various times and that the insured's inventory records used rounded numbers and approximate weights and failed to account for processing yield loss.²⁸ While the appeal deals primarily with the adequacy of jury instructions, the court found the inventory records to be so inadequate and contain so many errors as not to meet the burden of proof by a preponderance of the evidence so as to allow a reasonable inference that the inventory shortage was due to employee dishonesty.

In *Savannah Wholesale Co. v. Continental Casualty Co.*,²⁹ the appellate court reversed a directed verdict in favor of the insurer and remanded for a new trial a case where the plaintiff presented evidence that its gross profit margin had significantly declined over a nine-month period. The insured's managers had ruled out billing methods, bookkeeping errors, and other possible causes of loss; and the insured had discovered that a roof hatch that lead to a store room that had previously been locked from the inside was now unlocked. The court concluded that, if a jury chose to give full weight to the plaintiff's witnesses, it might reasonably conclude by a

²⁵ *Id.* at 10, 11 (citations omitted).

²⁶ 245 F.2d 513 (6th Cir. 1957).

²⁷ *Id.* at 515, 516.

²⁸ *Id.* at 520.

²⁹ 279 F.2d 706 (5th Cir. 1960).

preponderance of the evidence that the gross profit decline was due to employee dishonesty.

The opinion in *Reese Cadillac Corp. v. Glens Falls Insurance Co.*,³⁰ where the insured submitted a claim for 289 missing tires, indicates one person had full responsibility for orders and sales and ran the tire operation. The opinion further indicates the manager of the tire operation resigned without explanation and the manager's explanation for the discrepancy as resulting from credits due from suppliers was unfounded. The insurer appealed from a judgment in favor of the insured, contending that the insured had not conclusively proven the loss was due to employee dishonesty. The appellate court upheld the verdict, noting the combination of circumstances created a permissible inference of fraud on the part of the employee.

C. CASES UNDER THE EXCLUSION WITH AN EXCEPTION STANDARD

The Conclusive Proof requirement was a provision contained within the insuring clause of fidelity policies. Faced with a split of authority over the meaning of Conclusive Proof and finding courts interpreting the requirement to mean a simple preponderance of the evidence such as required in any civil case, the Surety Association of America in 1957 issued an inventory computation exclusion, which provided as follows:

This Policy does not apply: . . . to loss, or to that part of any loss, as the case may be, the proof of which, either as to its factual existence or as to its amount, is dependent upon an inventory computation or a profit and loss computation; provided however, this paragraph shall not apply to loss of Money, Securities or other property which the Insured can prove, through evidence wholly apart from such computations, is sustained by the Insured through any fraudulent or dishonesty act or acts committed by any one or more of the Employees.

The intent of the exclusion was:

1. to provide coverage only for such losses that are definitely due to dishonesty;
2. to state clearly that there is no coverage for any loss based on inventory computations or on profit and loss computations;
3. to rule out the determination of an amount of loss by the use of such computations; and

³⁰ 157 A.2d 331 (N.J. Super. Ct. App. Div. 1960).

4. to establish in advance the fact that coverage applies only to that part of any loss definitely proven to be caused by employee dishonesty.³¹

It is important to note that the exclusion does not exclude loss resulting from theft of inventory by an employee. It is equally important to note that the exclusion contains no language providing that an inventory computation or profit and loss computation may be used to establish the amount of loss where there is independent evidence of employee dishonesty.

In *Gillette Co. v. Travelers Indemnity Co.*,³² the exclusion was applied as intended. Gillette stored razor blades in a warehouse operated by Thompson Terminals, which had a comprehensive dishonesty, disappearance and destruction policy from Travelers. As assignee of Thompson Terminals, Gillette brought the case in federal district court. After a bench trial, a judgment was entered in favor of Travelers; and Gillette appealed. The appellate court addressed two questions: (1) was Gillette's proof of loss either as to its factual existence or its amount dependent on an inventory computation, and (2) if not dependent on an inventory computation, did Gillette prove by a preponderance of the evidence that any employee of Thompson stole the missing razor blades. Gillette argued on appeal that, if the exclusion were applied literally, the whole insurance contract would be illusory as the only way to prove a loss, other than by catching the employee in the act, is through records. The court's response was as follows:

While we have some sympathy with this argument, we think it must be rejected in view of the plain, unambiguous language of the policy. It expressly renders the policy inapplicable where proof of the loss or any part thereof is dependent upon an inventory computation. To hold that this specific language should be interpreted to mean something other than that plainly stated would constitute an infringement on the right of the parties to write their own contract.³³

Although some courts have applied the exclusion as initially intended, others have used a variety of theories with varying degrees of success to defeat the exclusion and allow use of inventory records to establish the amount of a loss.

1. Evidence Apart From the Inventory Computation

a. Alteration of Records. In *Fort Smith Tobacco & Candy Co. v. American Guarantee & Liability Insurance Co.*,³⁴ the court concluded that inventory computations could be used to prove the amount of a loss where there is evidence wholly apart from such computations that the loss was sustained through employee

³¹ Chelberg, *supra* note 1 (citing _____ Fields, *The Inventory Shortage Exclusion Clause and Its Effect on Losses*, ___ INS. COUNSEL J. ___ (Apr. 1971).

³² 365 F.2d 7 (7th Cir. 1966).

³³ *Id.* at 8, 9.

³⁴ 208 F. Supp. 244 (D. Ark. 1962).

dishonesty. The opinion is lengthy and excruciatingly detailed, both as to the facts of the underlying claim and the investigation conducted by the insurer. The plaintiff made a claim for the following items:

Cigarettes	\$5,672.77
Drugs and sundries	1,215.23
Appliances	7,388.13
Miscellaneous items	3,193.63
Fort Chaffee Account	6,215.10
Cash collections	<u>2,851.65</u>
Total	\$26,536.51

The employee admitted having taken the cash collections for his own personal use; however, he repaid that amount. The amount claimed for loss of cigarettes was broken into several time periods, the first of which amounted to \$4,023.82. Finally, it appears that the employee altered the cigarette inventory records to force a balance on two occasions during the time period there was a \$4,023.81 shortage in the cigarette inventory. The court stated:

All uncompensated losses claimed by the plaintiff have been directly established by an inventory computation. Hardcastle is implicated with the loss of approximately \$5,320.29 worth of cigarettes during the period August 2, 1958, to September 26, 1959, in that he altered the figures that Mr. Friedman had entered in the physical inventory of August 1, 1959; he forced a balance of the weekly inventory ending August 5, 1959; he failed to compute inventory sheet totals of weekly cigarette inventories after February 28, 1958, and entered fictitious totals in order to make the weekly inventories balance; and he was unable to account for the whereabouts of the individual files of the weekly cigarette inventories covering a period of 21 weeks in 1959, which had been computed by him and which should have been in his exclusive possession.³⁵

Accordingly, the court entered judgment for the insured in the amount of \$4,023.81 but declined to enter judgment for the other items claimed, apparently on the grounds that there was no evidence wholly apart from the inventory computations establishing that the loss of those items was due to employee dishonesty.

b. Getting Caught In the Act. One form of evidence often presented apart from the inventory computation is catching an employee or employees in the act of stealing.

³⁵ *Id.* at 255.

In *Gulf Enterprises, Inc. v. Maryland Casualty Co.*,³⁶ the employee was caught removing items from the insured's warehouse. There was also testimony that one customer came to the insured's warehouse several times a week and was always waited on by the employee, yet only six invoices for sales to this customer could be produced. Of course, no loss resulted when the employee was caught stealing because the items the employee was caught removing were returned. Nonetheless, the court permitted the use of inventory computations to establish the extent of a loss due to employee dishonesty on the grounds that catching the employee in the act was evidence "wholly apart" from the inventory computation so as to be within the proviso.

In *Harris W. Hall Co. v. Security Insurance Co.*,³⁷ an employee was arrested in the act of receiving \$600 of merchandise stolen from the employer. There was other evidence that the employee's thefts were regular and repeated over some time. Also, the inventory computation of more than \$23,000 greatly exceeded the \$10,000 coverage limit.

Catching two employees in the process of stealing from the employer, coupled with subsequent confession as to other thefts, would have been sufficient evidence wholly apart from the inventory computation to allow use of the inventory computations to establish the amount of loss resulting from employee dishonesty in *Tri-Motor Sales, Inc. v. Travelers Indemnity Co.*³⁸ However, despite the fact that the court determined evidence of inventory computations would be admissible under such circumstances, it upheld the trial court's directed verdict for the insurer on the grounds that the time period of the claimed loss exceeded the time period of the accused employee's employment, which would have required the jury to speculate as to the amount of loss resulting from dishonest acts while he was an employee of the insured.

However, some courts have continued to apply the Exclusion With an Exception as intended, even where employees had been caught stealing. In *United States Smelting Refining & Mining Co. v. Aetna Casualty & Surety Co.*,³⁹ the arrest of an employee with a bar of silver in his possession was insufficient evidence to permit introduction of inventory computations to establish the amount of loss due to employee dishonesty. The quantity claimed based upon inventory records amounted to approximately 12,000 pounds of gold and silver.

In another case where the quantity of goods the employee was arrested for stealing was relatively small in relation to the quantity claimed by inventory records, the court refused to permit the use of inventory records (computations) to prove the amount of loss due to employee dishonesty. The employee had been arrested while

³⁶ 267 So. 2d 733 (La. Ct. App. 1972).

³⁷ 289 So. 2d 832 (La. Ct. App. 1974).

³⁸ 119 N.W.2d 327 (Wis. 1963).

³⁹ 372 F. Supp. 489 (S.D.N.Y. 1974).

stealing four dresses valued at \$20, but the inventory records sought to establish a loss of 3,595 garments over a seven-month period. In addition, the particular employee had only worked for the insured for the last two months of the seven-month period.⁴⁰

In *Danal Jewelry Co. v. Fireman's Fund Insurance Co.*⁴¹ the insured, concerned over the quantity of white metal being ordered in comparison to the amount of metal used to manufacture goods, began an investigation which led to the discovery of more than thirty bars of the metal in an employee's car. The employee admitted the theft of the thirty bars, all of which were recovered, but denied taking any other bars of metal. Despite the court noting that the evidence created a suspicion that the employee may have stolen more, it concluded it would be speculation to conclude the limited amount admitted supported the entire claimed loss.

Another form of evidence apart from inventory records, whether a computation or an enumeration, is a confession, guilty plea by, or conviction of the employee. In the so-called "caught in the act" cases, the employees admitted or confessed or pleaded guilty to taking that with which they were caught. The following cases focus more on an employee confession to some amount other than what he or she may have been caught stealing.

c. Confessions. In *Prager & Bear, Inc. v. Federal Insurance Co.*,⁴² the court held that there was an absence of independent evidence to show employee dishonesty and did not permit the use of inventory records to show the amount of loss, but suggested that, if the employer could have presented to the insurer an admission by the warehouse manager that he had sold merchandise and pocketed the proceeds, that would be sufficient evidence to allow introduction of an inventory computation to prove the actual amount of the loss or if the insurer had paid such a claim.

In *Kentuckiana Sales, Inc. v. Security Insurance Co.*,⁴³ admission to and criminal conviction for theft of specific items was not admissible as evidence wholly apart from the insured's inventory computation to permit introduction of the inventory computation to prove existence of loss or the amount. The loss involved the theft of books of trading stamps and merchandise. The employee was caught with books of trading stamps and a blanket and coffee maker belonging to the employer. The employer claimed a loss of more than \$9,000 in merchandise. The employee originally admitted to the entire theft in a civil proceeding but denied theft of any items other than those with which he was caught in a criminal prosecution. The court

⁴⁰ *Teviro Casuals, Inc. v. Am. Home Assurance Co.*, 439 N.Y.S.2d 145 (1981), *aff'd on basis of lower court opinion*, 429 N.W.2d 830.

⁴¹ 264 A.2d 320 (R.I. 1970).

⁴² 136 Cal. Rptr. 340 (Cal. Ct. App. 1977).

⁴³ 394 S.W.2d 744 (Ky. 1965).

rejected use of the prior admission on the grounds that an out-of-court statement of a witness was not admissible as substantive evidence.⁴⁴

2. Ambiguity

In *Tri-Motor Sales, Inc. v. Travelers Indemnity Co.*,⁴⁵ the insured sought to recover \$14,006.31 for loss due to employee dishonesty over approximately fourteen months, although the employee who admitted theft of some merchandise had only worked at the insured for six months. The amount admitted to was \$494, which, after recovery of some items, produced a net loss of \$246. The trial court excluded evidence of the inventory computation producing the \$14,006.31 amount and entered judgment in the amount of \$246. On appeal, the Wisconsin Supreme Court considered two questions: (1) were the inventory computations excludable; and (2) if admissible, were they sufficient to conclude a reasonable jury could award loss in excess of that awarded by the court as a matter of law. The court found the inventory computations were not excludable on the grounds that the exclusion was capable of more than one reasonable interpretation and thus must be construed under the reasonable interpretation most favorable to the insured:

This proviso may be interpreted two ways as applied to the facts of the instant case: (1) The words “as to its amount” appearing in the absolute prohibition preceding the semicolon carry over into the proviso and prohibit use of inventory computations to prove the amount of the plaintiff's loss even though plaintiff has established by independent evidence that Woodward did steal plaintiff's parts and accessories during the period of his employment; or (2) Once plaintiff has provided by independent evidence that Woodward did steal parts and accessories during the period of his employment, the prohibition against use of inventory computations in that portion of the paragraph preceding the semicolon is rendered inoperative.

If the first interpretation were to be adopted the proviso after the semicolon would serve no useful purpose because if the insured was able to prove its loss by evidence wholly apart from computations made from its inventory records, then such computations would be merely cumulative evidence of the loss. This would appear to be an absurd result especially in view of sec. 6 which requires insured to keep accurate records. We deem the wording of the proviso sufficiently ambiguous to render applicable the rule that in case of ambiguity or reasonable doubt as to the meaning of exclusion clauses in a policy, drafted by an insurance company, the

⁴⁴ *But see* Sommer v. Gen. Ins. Co. of Am., 259 N.E.2d 143 (Ohio Ct. App. 1970) (the admission to theft by an employee was sufficient evidence wholly apart from an inventory and profit and loss computation to allow the computation to be admitted in evidence to show the amount of such loss).

⁴⁵ 119 N.W.2d 327 (Wis. 1963).

ambiguity is to be resolved against the insurer.... Therefore, we adopt the second interpretation and hold the inventory computations, which would tend to prove the amount of the plaintiff's loss, would not be excluded under the terms of the policy where independent evidence first showed that Woodward had stolen items of plaintiff's parts and accessories during the period of his employment.⁴⁶

Despite ruling that the inventory computation was admissible, the court upheld the verdict because a jury could only speculate what portion of the \$14,006.31 was taken during the six-month period the individual was employed. The opinion reflects that there was a variance of more than \$12,000 between the book value and physical count of inventory in a previous ten-month period, which was 13.28% of total sales, while the variance in the fourteen-month period was only 9.82% of total sales. In addition, the plaintiff tried to show that, during the six months the individual was employed, purchases of parts exceeded sales by \$13,982.59 but did not show the accused employee had exclusive control over purchases.⁴⁷

In *Gotcher Engineering Manufacturing Co. v. United States Fidelity & Guaranty Co.*,⁴⁸ the exclusion was held not to be ambiguous. The court considered a physical count of items to be an inventory computation and applied the exclusion to preclude its introduction to prove the amount of the insured's claimed loss. A previous physical count had shown specifically identified items in the insured's warehouse to have a value of \$26,923.79. The insured's records further indicated that in the subsequent eighteen months the insured had sent specifically identified items to the warehouse valued at \$29,999.90 and that over the same period of time specifically identified items valued at \$42,461.22 had been shipped from the warehouse. Finally, another physical count identified specific items in the warehouse with a total value of only \$791.13, although the insured's records indicated that there should have been specifically identifiable items in the warehouse with a value of \$14,462.26.

3. Is It Inventory?

The term "inventory" is not defined in the policies. At least one court, in *Chenoweth-Chapman Corp. v. American Insurance Co.*,⁴⁹ has defined the term "inventory" to mean only goods held for sale or lease, or to be furnished under contracts for services. Under the UCC, inventory is defined as goods held for sale or lease, or to be furnished under contracts for services. The principal test is that the goods must be held for immediate or ultimate sale. In *Chenoweth-Chapman*, the insured operated dry-cleaning stores and calculated its loss by comparing

⁴⁶ 119 N.W.2d at 331(citations omitted).

⁴⁷ *Id.* at 333-34.

⁴⁸ 193 So. 2d 115 (Miss. 1966).

⁴⁹ 553 S.W.2d 872 (Mo. Ct. App. 1977).

computer-generated cards for customers' deposits of clothing to physical count of clothing in its stores. The court noted that the clothing was not held for sale or lease and did not constitute raw materials to be processed or consumed in the insured's business. Thus, it was not an inventory.

4. Reasonable Expectations

In *Hoboken Camera Center, Inc. v. Hartford Accident & Indemnity Co.*,⁵⁰ the insured brought an action to recover approximately \$42,000 in missing inventory at three of its stores located in Minnesota. The trial court granted a motion for summary judgment in favor of Hartford, based upon a stipulation of facts; and the insured appealed. The stipulation was as follows: (1) on one occasion an employee was given the sum of \$99.96 and the sum of \$6.52 to deposit but only deposited the \$6.52 amount; (2) on another occasion, at close of business, two cameras were observed in a locked case, but the next morning, both cameras were missing; (3) on another occasion, one employee told another employee he had removed money from the cash register to pay wages to a third employee, but at the time wages were paid by check; and (4) the insured would introduce evidence of its inventory control system at trial and an analysis of the inventory control records would reveal a loss of \$42,705.22.⁵¹

The appellate court concluded that the trial court had read the exclusion literally and determined that because each of the specific instances of employee theft offered was less than the deductible and the remainder of the loss rested on inventory records, the insured's claim was precluded under the exclusion.⁵² The court cited its prior decision in *Reese Cadillac Corp.*⁵³ for its approach in refusing to interpret literally the language of the policy. The court then stated:

To deny an insured the right to adduce proof of inventory records for either of these purposes might in a particular case defeat justice by precluding recovery on a meritorious claim by use of the only the proofs reasonably available to the insured and probative thereof. So to do would contravene public policy, not only in defeating the reasonable expectations of coverage of the purchaser of insurance but also in allowing a private agreement to nullify the inherently probative effect of relevant evidence.⁵⁴

⁵⁰ 226 A.2d 439 (N.J. Super. Ct. App. Div. 1967).

⁵¹ *Id.* at 441.

⁵² *Id.* at 448.

⁵³ 157 A.2d 331 (N.J. Super. Ct. App. Div. 1960).

⁵⁴ *Hoboken Camera*, 226 A.2d at 448.

5. Is It an Inventory Computation or a Profit and Loss Computation or an Enumeration?

The term "computation" is not defined in the policies, and one method used by some courts to allow use of inventory records to prove the amount of a loss is where the records are not considered a computation.

In *Paramount Paper Products Co. v. Aetna Casualty & Surety Co.*,⁵⁵ the insured operated a printing business. Two employees were arrested and convicted for the theft of stock, all of which was recovered. The insured sought to prove a larger, unrecovered loss due to employee dishonesty through use of its inventory records. The record indicates that the insured took inventory on a unit basis, reduced it to a dollars and cents number, and adjusted that number for the use of raw-material costs obtained from the insured's books and records.⁵⁶ The trial court granted the insurer's motion to dismiss, and the insured appealed. In upholding the dismissal, the court indicated that there was no ambiguity in the "proviso" to the exclusion, stating:

The plain meaning of the language used definitely indicates that proof, other than that arrived at by means of an inventory or profit and loss computation, is required not only as to the fact of a loss, but also as to the amount of such loss although such computations are not forbidden as corroborative evidence.⁵⁷

The court further observed that a comparison of physical count of units is an enumeration, not a computation, and would be admissible to show the amount of loss where there was evidence wholly apart from such enumeration to show fraudulent or dishonest acts by an employee:

It would, therefore, appear that the exclusionary clause does not bar an inventory made upon a unit basis, but does bar inventories which require computation to reduce them to some other basis, or, where when one inventory is compared with a later one, it is necessary to compute and allow for sales and purchases made in the interim.⁵⁸

In concurring in the result, two justices concluded by stating:

The policy provision in our opinion prohibits proof by inventory records that are not trustworthy. An important circumstance is the degree of estimation involved in the inventory system. The probative value of unit-type or perpetual inventory records is ordinarily higher than that of records based chiefly on generalized estimates. The distinction between an "enumeration" and a "computation" of

⁵⁵ 157 N.W.2d 763 (Neb. 1968).

⁵⁶ *Id.* at 764.

⁵⁷ *Id.* at 768.

⁵⁸ *Id.*

inventory shortage is subtle, productive of confusion, and unserviceable. We cannot formulate a single rule that will satisfactorily cover the innumerable variables of trustworthiness. We concur in the result.⁵⁹

Similarly, in *Popeo v. Liberty Mutual Insurance Co.*,⁶⁰ the court discussed the difference between a physical count of specific items and purchase records and permitted the use of purchase records to prove the amount of loss as outside the scope of the inventory computation exclusion.

*J.R. Norton Co. v. Fireman's Fund Insurance Co.*⁶¹ involves a feedlot where the insured claimed that an excessive number of cattle died due to mismanagement, which the manager concealed by falsifying death rates and inventory records. The case is interesting for the fact that the court overturned a directed verdict for the insurer and allowed the case to be submitted to a jury on the question of whether the concealment, which the court referred to as admittedly dishonest, contributed to some of the loss by preventing the insured from taking corrective measures sooner. On the issue of admittance of inventory records, which the trial court had refused to allow, the court stated:

While there is some conflict in the reported cases, we hold, with what appears to be a majority view, that under such a policy provision the plaintiff must first make a prima facie showing, other than through inventory computation or profit and loss computation, that some loss has occurred which is causally related to the insured misconduct of one or more employees. Having done so, inventory computations and profit and loss computations may be introduced to corroborate the loss and prove the amount.⁶²

The court also indicated some courts have made a distinction between a physical count of specific items and a computation of inventory based upon accounting principals but did not rule on that basis.

In *Schenectady Hardware & Electric Co. v. Hartford Accident & Indemnity Co.*,⁶³ the court declined to grant the insurer a motion for summary judgment on the basis that the claim included items alleged to constitute inventory computations on the grounds that it could not rule as a matter of law the insured could not overcome the exclusion by showing an enumeration of specific items.

⁵⁹ *Id.* at 769.

⁶⁰ 343 N.E.2d 417 (Mass. 1976).

⁶¹ 569 P.2d 857 (Ariz. Ct. App. 1977).

⁶² *Id.* at 861 (citations omitted).

⁶³ 464 N.Y.S.2d 50 (N.Y. 1983).

In *Coca-Cola Bottling Co. v. Transamerica Insurance Co.*,⁶⁴ conflicting statements by a soft-drink vending machine route-man admitting and denying he removed money from the vending machines he serviced were considered independent evidence of losses to permit use of sales tickets to prove the amount of the loss. In that case the court also questioned whether the sales tickets were an inventory computation in the first place.

D. CASES UNDER THE ABSOLUTE EXCLUSION

Faced with a growing number of court decisions allowing the use of inventory computations or profit and loss computations to prove the amount of a loss once the insured had established by some degree of evidence that an employee had committed dishonest or fraudulent acts under the Exclusion with an Exception Standard, the Surety Association of America in 1977 revised the inventory computation and profit and loss computation exclusion as follows:

This Policy does not apply: . . . to loss, or that part of any loss, as the case may be, the proof of which, either as to its factual existence or its amount, is dependent upon an inventory computation or a profit and loss computation.

While the substance of the exclusion has not changed since the 1977 revision, the exclusion currently appears as follows:

We will not pay for loss as specified below:

- b. Inventory Shortages: Loss, or that part of any loss, the proof of which as to its existence or amount is dependent upon:
 - (1) An inventory computation; or
 - (2) A profit and loss computation.⁶⁵

Aside from an attempt to place the 1977 language in a "plain English" form, there is little difference between the 1977 and the current version of the exclusion. However, it is readily apparent that there is a significant difference between the 1957 language in the exclusion and its form in 1977 and 1990. That difference is the deletion of what is commonly referred to as the "proviso" or "exception" within the exclusion:

⁶⁴ 61 F.R.D. 120 (N.D. Ga. 1973).

⁶⁵ EMPLOYEE DISHONESTY COVERAGE FORM (Commercial Crime Coverage Form A-Blanket), reprinted in _____; PUBLIC EMPLOYEE DISHONESTY COVERAGE FORM (Commercial Crime Coverage Form O-Per Loss), reprinted in _____; PUBLIC EMPLOYEE DISHONESTY COVERAGE FORM (Commercial Crime Coverage Form P-Per Employee), reprinted in _____.

provided however, this paragraph shall not apply to loss of Money, Securities or other property which the Insured can prove, through evidence wholly apart from such computations, is sustained by the Insured through any fraudulent or dishonesty act or acts committed by any one or more of the Employees

Despite the elimination of the "proviso" or "exception" from the inventory and profit and loss computation, the courts have continued to find ways to admit inventory computations in some cases.

1. Is It a Computation or an Enumeration?

In *Ace Wire & Cable Co. v. Aetna Casualty & Surety Co.*,⁶⁶ the insured made claim for 116 reels of wire discovered missing from its warehouse upon a physical inspection and comparison to the records of the previous physical inspection. Most of the reels were four feet wide and weighed over 5,000 pounds. The trial court entered summary judgment in favor of the insurer based upon the inventory computation exclusion. The Supreme Court, Appellate Division, reversed on the grounds that the loss was established by personal observation and knowledge, not inventory computation. Aetna appealed, and the court of appeals affirmed the appellate division's reversal of summary judgment in favor of the insurer, stating: "The comparison of inventory records kept on a unit basis with a physical count of items on hand is not an 'inventory computation' within the meaning of the exclusion in section 2(b) of a comprehensive dishonesty, disappearance and destruction policy of insurance."⁶⁷

Among other facts set forth in the opinion are that the warehouse was protected by a monitored alarms system; a physical stock inspection was conducted each year; many of the reels were quite large and required special equipment to be moved; many of the reels were items for which there was little demand, which was a fact known only to the warehouse employees; and six months before the physical stock inspection the warehouse manager quit without explanation or advance notice.⁶⁸ The court also noted that Section 4 of the policy dealing with unidentified employee coverage requires only that the evidence reasonably prove the loss was due to employee dishonesty.⁶⁹ The court stated:

The problem is in the words "inventory computation" as used in section 2(b). Defendant would read the phrase to cover any loss the proof of which requires reference to inventory records. Such a reading, however, ignores the fact that the word "computation" carries more than one connotation. Thus, it may mean "the result of

⁶⁶ 457 N.E.2d 761 (N.Y. 1983).

⁶⁷ *Id.* at 762.

⁶⁸ *Id.* at 762-63.

⁶⁹ *Id.* at 763-64.

computation: amount computed” (Webster's Third New International Dictionary, p. 468). It may, however, also mean “the act or action of computing: calculation, reckoning” or “a way or system of reckoning” (*id.*) or “The act of computing, numbering, reckoning, or estimating” (Black's Law Dictionary [5th ed], p. 261). Thus, it involves concepts of both mathematical exactness and of probability or estimation.

To construe it in the first sense would be to make it all but impossible for an insured to recover under the policy for, except in situations in which an employee is caught in the act with the stolen goods in his possession, it will always be necessary in order to prove the amount of a loss to ascertain the number of units involved through an inventory count. To construe it in that fashion is also inconsistent with section 6 of the policy, which requires the insured to “keep records of all insured property in such manner that the Company can accurately determine therefrom the amount of loss.”

The tests to be applied in construing an insurance policy are common speech and the reasonable expectation and purpose of the ordinary businessman. The ambiguities in an insurance policy are, moreover, to be construed against the insurer, particularly when found in an exclusionary clause. We conclude, therefore, that section 2(b) should be read to exclude only losses the proof of which, as to factual existence or amount, turns upon probabilities deduced or estimations made from comparison of posttheft-discovery dollar, as distinct from unit, inventory amounts with a pre-discovery dollar amount, or of a posttheft unit number with a pretheft number calculated from a pretheft dollar inventory amount, but not to exclude a loss which can be established by showing that a particular item or unit of goods observed and identified as present at one physical inventory count is not present at the next.

To conclude otherwise would produce absurd results. Thus, an insured, able to meet the reasonable proof requirement of section 4 (as, for example, by eyewitness testimony of a person who could identify as an employee of the insured one of a group he observed loading merchandise on a truck in the middle of the night and his own testimony that the employee had not been authorized to do so and had not since the taking returned to work), could not recover because he could not use pre and posttaking unit inventory records to establish what had been taken and in what quantity.

We hold that the phrase “inventory computation” is to be construed to proscribe proof of the fact or amount of loss through a generalized estimate, calculated, for example, from sales records and

average markup, of what the dollar value of inventory on hand should be. It does not, however, preclude proof of the fact or amount of loss through inventory records (whether perpetual or periodically made) detailing the actual physical count of individually identifiable units . . .

⁷⁰
..

The insured in *Strings & Things in Memphis, Inc. v. State Auto Insurance Cos.*⁷¹ sold musical instruments at retail. It determined that some of the merchandise subject to floor plan financing was missing. All of the missing items were identifiable by serial number, sale of any item would have been evidenced by sales receipt with serial number, and these items were kept in secured areas. When judgment was entered dismissing the suit, the insured then appealed. Citing *Ace Wire & Cable*,⁷² the appellate court reversed:

The language in the policy in this case refers to an “inventory computation,” which denotes some type of mathematical calculation. Considering the language used, we feel that the holding of the court in *Ace Wire* correctly construes the policy exclusion as not applying to a physical count of individually identifiable units of inventory. When dealing with individual identifiable units, there is no computation involved; the unit is simply present and accounted for, or it is missing. We think it is significant that the policy language excludes a loss based on an inventory computation rather than on an enumeration of missing items. In the case at bar, the evidence showing the purchase of the individual items and the absence of these items from inventory without evidence of a sale is not an inventory computation as contemplated by the policy.⁷³

The federal district court denied the insurer’s motion for summary judgment in *Dawson Industries, Inc. v. Affiliated FM Insurance Co.*⁷⁴ on the grounds that an affidavit submitted by the insured, an apparel manufacturer, described the “cut and sold” report “in a manner suggesting that it is not an ‘inventory computation.’”⁷⁵ Thus, an issue of material fact precluded summary judgment. There had been a burglary at the insured’s premises, and an employee had pleaded guilty to receiving the stolen merchandise. The insured made a claim in excess of the \$250,000 policy limit in reliance upon its “cut and sold” report.

*Cambridge Trust Co. v. Commercial Union Insurance Co.*⁷⁶ did not involve a bond containing an inventory profit and loss computation exclusion. It was, in fact, a

⁷⁰ *Id.* at 764-65 (citations omitted).

⁷¹ 920 S.W.2d 652 (Tenn. Ct. App. 1995).

⁷² 457 N.E.2d 761 (N.Y. 1983).

⁷³ 920 S.W.2d at 657.

⁷⁴ 145 F.R.D. 327 (S.D.N.Y. 1992).

⁷⁵ *Id.* at 329.

⁷⁶ 591 N.E.2d 1117 (Mass. App. Ct. 1991).

claim for employee dishonesty under a financial institution bond. In that case the bank employee was in charge of the proof department at the bank. The employee would routinely remove checks she had written on an account she opened at another bank, payable to the customers of the bank where she worked, from the transit cash letter to the insured's correspondent bank. In this way she prevented the checks from being charged against the account she had opened at the other bank. When the correspondent bank reported to the employee that the checks did not equal the total of the transit cash letter tape, she was supposed to make a copy of the check and resubmit it; however, she simply charged off the amount by a general ledger ticket. In this manner she embezzled \$14,703. However, the bank made claim for an additional \$151,198 in checks which apparently did not get transmitted to its correspondent bank but which were either: (1) not drawn on the employee's account at the other bank; (2) not supported by general ledger tickets charging them off; or (3) were subject to one of several other categories of irregularities.

A jury awarded the entire amount claimed to the insured bank, and Commercial Union appealed, contending that the evidence of the \$14,703 in checks drawn on the employee's account, referred to as the strongest evidence of embezzlement, should not have been used to support the claim of embezzlement in connection with the other checks. The court discusses several cases regarding fidelity bonds containing an inventory and profit and loss computation and concludes:

Proof of relevant improprieties by an employee may serve to corroborate that an inventory loss is the consequence of that employee's infidelity. This has been the view taken in Massachusetts. The financial institutions bond which CU furnished to the bank did not contain an analog to the "inventory computation" exclusion; therefore the evidence of Yard's misconduct, coupled with the evidence of loss in the proof and transit department, is all the more easily acceptable as sufficient to place before the jury the question whether Yard was responsible for all of the loss claimed by the bank.⁷⁷

In *New York University v. Continental Insurance Co.*,⁷⁸ the insured determined there was a shortage of clothing merchandise in one of its bookstores. After investigation it accused the store's general merchandise buyer of conspiring with a vendor to bill the school for merchandise never received and claimed a loss of more than \$1,600,000. The trial court dismissed the insured's affirmative defense based upon the inventory and profit and loss exclusion, relying upon the prior decision of *Ace Wire & Cable Co.*

⁷⁷ *Id.* at 1121 (citation omitted).

⁷⁸ 639 N.Y.S.2d 283 (N.Y. 1995).

On appeal, the court held that it was error to dismiss the affirmative defense based upon the inventory and profit and loss computation at such an early pleading stage because the insured had not shown it was meritless as a matter of law:

Our decision in *Ace Wire* was driven by two competing considerations. On the one hand, construing the exclusion to apply to all proof of loss based on any form of inventory records would lead to the absurd result that an insured's recovery would be limited to those losses that were substantiated only by a witness who actually viewed the employee stealing the insured's inventory. On the other hand, insurers include the inventory shortage exclusion in the employee dishonesty endorsements to protect themselves against "claims based on erroneous or falsified inventory or profit and loss computations . . . [and because] [i]nventory records and other business records are less reliable than other evidence in proving that a loss of goods has been sustained or that a loss is attributable to employee dishonesty." Accordingly, we held that to the extent an insured suffered losses that could be proven only by estimation of the loss by calculating the pre- and posttheft dollar value of the inventory, such losses would fall within the exclusion. Nothing in *Ace Wire*, however, prevents insureds from relying on inventory records which document the actual inventory on hand.

The practical effect of that decision is that insureds are obligated to perform and record actual physical inventories on a regular basis so that inventory shortages will be discovered within a reasonable period of time and may be accurately valued. In that way the insured will be indemnified for the actual losses timely discovered, while the insurer will be protected from indemnifying the insured for losses that may accumulate to excessive amounts over a period of years, and which can be proven only by estimation.

Here, the plaintiff alleged that its losses occurred by Johnson's falsification of documents, which it had presented to defendants. Thus, plaintiff's averments would establish the *existence* of the loss by proof other than by estimation of an inventory shortage. On the other hand, plaintiff did not establish as a matter of law that it could prove the *amount* of its loss by other than dollar estimates. In an affidavit in support of its cross motion, an employee of plaintiff averred that the loss was revealed and measured by comparison of a 1990 physical inventory to accounting records. Depending on the nature of those accounting records, plaintiff may or may not be able

to prove some or all of its losses by a method allowed by the holding of *Ace Wire*.⁷⁹

In *Blitz Corp. v. Hanover Insurance Co.*,⁸⁰ the insured made a claim for specific items missing from its inventory: 1,702 sanding discs and 29,896 rolls of masking tape. Both sides moved for summary judgment. The insurer argued the insured's claim was barred by the inventory and profit and loss computation exclusion. The insured argued the exclusion was not applicable because its claim was based upon specific items that were missing without having been sold, not on a computation. To determine what specific items were missing, the insured compared packing slips from suppliers to records of specific items sold. While the court noted this would not be an inventory computation, it also noted there was conflicting evidence as to whether the insured could, in fact, determine what specific items were missing from packing slips and records of items sold because the insured did not verify quantities received against packing slips and there was evidence of at least one instance where the quantity received did not match the quantity on the packing slip.

The insured also argued there was independent evidence of employee dishonesty, which would allow use of an inventory computation to prove the amount of that loss. This independent evidence was elimination of other possibilities by showing the security controls at the warehouse and by showing that, subsequent to being fired, a driver was found loading two cases of discs into his truck. However, neither of the cases had any markings that would identify them as belonging to the insured. Because there were conflicting issues of fact as to whether the insured could prove loss of specific items and whether there was independent evidence of employee dishonesty to allow use of inventory computation to prove the existence of the amount of loss, both motions were denied.

However, with regard to the inventory and profit and loss computation, the court first noted as follows:

It is undisputed that Illinois law applies to plaintiff's contract claim. No reported decision of an Illinois state court addresses the enforceability or construction of an inventory shortage clause of an insurance contract. However, the Seventh Circuit, apparently applying Illinois law, has enforced such a provision, as has a court in this district applying Illinois law.⁸¹

The court then stated:

Courts have disagreed as to how inventory evidence may be considered when there is other independent evidence of employee

⁷⁹ *Id.* at 291-92 (citations omitted).

⁸⁰ No. 95-C2725, 1996 WL 308233 (N.D. Ill. 1996)(citations omitted).

⁸¹ *Id.*

dishonesty. For more than twenty years, however, the trend has been toward allowing inventory evidence to be used to prove the amount of the loss where there is sufficient independent evidence of employee dishonesty, including in cases with exclusionary language identical or virtually identical to the clause in the present case. In 1977 the California Appellate Court stated:

More recent cases tend to allow an inference of employee dishonesty to be drawn from relatively thin circumstantial evidence and then to permit the full extent of the losses to be proven by inventory comparisons. Generally, these cases have required some proof of dishonesty by employees as a condition precedent to the admission of inventory comparisons to establishing the full amount of loss. In some instances, the amount of loss proven to be a result of dishonesty has been only a small fraction of the total loss claimed. Barr holds that Illinois would follow the modern trend and this court agrees.⁸²

2. Proof By Other Means

In *Hanson PLC v. National Union Fire Insurance Co. of Pittsburgh, PA*,⁸³ the insured operated a meat-processing plant with a rendering department that produced tallow from meat byproducts. Hanson PLC made claim for a sum in excess of \$1,500,000, claiming its employee had knowingly overpaid a supplier of meat byproducts. Payment was made for the byproducts based upon a yield formula of tallow rendered. The employee admitted to knowing raw materials from the supplier were not meeting the yield formula that was the basis of payment. The employee said he continued to make payments based upon the higher yield because the supplier had threatened to stop supplying any raw materials, which would have resulted in closing the rendering department.

The case is often cited with regard to the issue of manifest intent to cause loss. With regard to the inventory computation exclusion, the court upheld a finding that as a matter of law the proof of loss was not dependent upon an inventory computation. The insured had used four different methods to calculate its loss. The first method was a comparison of yield from raw materials, sold by the supplier to other plants, which were substantially below the yield formula that the insured had used to pay for the raw materials. The second method was to compare a yield test on the last load from the supplier to yield paid for using the formula on previous loads, which again showed a substantial discrepancy between that load and the yield formula used to pay for previous loads. The third method was to compare yield on loads from the supplier to yield on loads from other suppliers, which again showed a

⁸² *Id.* at *2 (citation omitted).

⁸³ 794 P.2d 66 (Wash. Ct. App. 1990).

substantial discrepancy as to yield for loads from the supplier in question as compared to yields from other suppliers. Finally, the insured conducted a physical inventory, which revealed a shortage. The court concluded only the fourth method would fall within the definition of an inventory computation exclusion because it was not based upon a physical count of individual items.

3. Ambiguity

In *Movie Distributors Liquidating Trust v. Reliance Insurance Co.*,⁸⁴ an employee was caught with video tapes in an apartment and admitted to stealing video tapes from his employer. Another employee testified that she had observed other employees stealing tapes. The court simply found the terms "inventory" and "profit and loss computations" ambiguous.

4. Unidentified Employee Coverage/More Than One Occurrence

In *Reedy Industries, Inc. v. Hartford Insurance Co. of Illinois*,⁸⁵ a claim was made under the unidentified employee dishonesty coverage of the policy for 439 canisters of freon, valued at \$83,584.80, which were discovered to be missing upon taking a physical inventory. The policy contained the current, plain English version of the inventory computation and profit and loss computation. The trial court granted summary judgment to the insurer, and the insured appealed. While the appellate court did not address the issue of the inventory computation exclusion, it did affirm the summary judgment granted to the insurer, stating:

Under the express terms of the policy, coverage is limited to a loss in excess of \$10,000 per occurrence. Even if we assume that Ward's computations do not fall within the inventory shortages exclusion and that the missing freon was due to employee dishonesty, Reedy failed to present any evidence as to the number of occurrences and which occurrences, if any, are in excess of the deductible.⁸⁶

E. PROFIT AND LOSS COMPUTATION

While there are numerous cases dealing with inventory computation, there are very few cases dealing with profit and loss computation.

*Mapes Casino, Inc. v. Maryland Casualty Co.*⁸⁷ makes fascinating reading, if one is interested in learning about casino operations. It is also significant for its application of the profit and loss exclusion. Mapes Casino was notified by another casino that a large amount of chips from Mapes Casino was being cashed there. This led to further investigation and the arrest of a man who admitted that for

⁸⁴ 595 A.2d 1302 (Pa. Super. Ct. 1991).

⁸⁵ 715 N.E.2d 728 (Ill. App. Ct. 1999).

⁸⁶ *Id.* at 732.

⁸⁷ 290 F. Supp. 186 (D. Nev. 1968).

approximately twenty months he had been cashing the chips for unnamed employees of Mapes Casino. He would receive a telephone call instructing him to go to a car and pick up chips; thereafter, he would cash them in at other casinos and return the money to the car, less a portion for his services. Mapes Casino sought to make a claim for loss due to employee dishonesty in the amount of \$431,024. This amount was arrived at by multiplying the total “drop” (beginning bank, plus cash and chips received, less chips taken from the table) times a normal twenty percent win factor. This produced an expected win of \$632,559 for the time period from which the actual win of \$201,535 was subtracted. The court determined that this was a profit and loss computation and that the decline in win percentage could be due to many other factors other than employee dishonesty. Nonetheless, the court did award judgment to the insured in the amount of \$56,400, based upon testimony of various individuals as the average amount of stolen chips cashed each week.

In *Fidelity and Deposit Co. of Maryland v. Southern Utilities, Inc.*,⁸⁸ the insured sought to make claim for \$261,685.01 in construction materials converted by a vice-president. The insurer contended the amount claimed was based solely upon the difference between an estimate of materials for a job and the actual costs of the job. The court stated, “If this were true, proof would be barred under the exclusion.”⁸⁹

In *Security Insurance Co. of Hartford v. Wilson*,⁹⁰ the Wilsons made a claim for employee dishonesty by the manager of two businesses they owned. The proof of loss filed was supported only by a profit and loss statement prepared by their accountant. The trial court granted summary judgment in favor of the insurer, and the Wilsons appealed alleging, among other things, there was other evidence of employee dishonesty. The appellate court affirmed the summary judgment, noting that no other such evidence had ever been furnished.

F. SUMMARY

1. The Conclusive Proof Standard

Under the Conclusive Proof Standard, courts that have not permitted the use of inventory records to establish the amount of a loss due to employee dishonesty appear to have done so primarily on the grounds that circumstantial evidence must eliminate all other causes of loss.

Those courts that have allowed use of inventory records to establish the amount of a loss due to employee dishonesty have done so on the grounds that the rules of evidence require only a preponderance of evidence or the language must be construed reasonably in a fashion consistent with the purpose of the contract, which

⁸⁸ 726 F.2d 962 (Ga. Ct. App. 1984).

⁸⁹ *Id.* at 695.

⁹⁰ 800 F.2d 232 (10th Cir. 1986).

is to provide coverage for employee dishonesty. To support that a reasonable construction of the policy permitted use of inventory records, the courts that have permitted use of inventory records often refer to those sections of the policy providing unidentified employee coverage and requiring the insured to keep adequate records as support for their position.

2. The Exclusion With an Exception

Under the Exclusion With an Exception approach, courts that have not allowed inventory and profit and loss computations to be used to establish the existence or amount of a loss due to employee dishonesty have done so primarily on the grounds that the parties are free to contract as they see fit. Thus, under the terms of the exclusion, there must be evidence wholly apart from--independent of--the computation to show both that the loss is due to employee dishonesty and the amount thereof. Thus, even an admission to or being caught stealing one amount does not show any other amount is a loss due to employee dishonesty.

Courts that have allowed the use of inventory and profit and loss computations to prove the amount of a loss due to employee dishonesty first require that there must be some independent evidence of employee dishonesty, but once that is established, inventory records can be admitted to show the amount of loss due to employee dishonesty. The independent evidence of employee dishonesty can consist of a variety of factors such as catching the employee in the act, a confession, unusual circumstances such as a sudden unexplained resignation, and/or elimination of other causes of loss by security systems. Seldom is a single factor sufficient. Once the court has determined that there is sufficient independent evidence of employee dishonesty, a variety of legal theories have been used to avoid the application of the exclusion as written. Some courts have considered the exclusion ambiguous. Other courts have asserted that the language of the exclusion must be applied in light of the reasonable expectations of the insured. Still other courts have found that the records were not an inventory or that the records were not a computation.

3. The Absolute Exclusion Standard

With the elimination of the proviso or exception from the inventory and profit and loss exclusion, it became more difficult for courts to consider the exclusion ambiguous, although one court has simply determined that the terms "inventory" and "profit and loss computations" are ambiguous.⁹¹ Instead, courts have focused on the word "computation" and have allowed use of inventory records that can be described as an enumeration. In its simplest definition, an enumeration is a comparison of one physical count to another. However, not all inventory records are an enumeration. It appears that the higher the degree of estimation in arriving at an amount, whether expressed in units or dollars, the less likely the records will be consideration an enumeration, and the greater the likelihood they will be a computation.

⁹¹ *Tri-Motor Sales, Inc. v. Travelers Indem. Co.*, 119 N.W. 2d 327 (Wis. 1963).

Accordingly, in handling any claim for employee dishonesty involving inventory, it becomes essential to know and understand inventory accounting methods as they relate to the difference between an enumeration and an inventory computation in separating the wheat from the chaff.

III. An Accounting Perspective on Inventory Computation

A. INTRODUCTION

To separate the wheat from the chaff, it is necessary to have an understanding of inventory processes and methods by which insureds record inventory, which is often the basis for the quantum of the employee dishonesty loss amount. This article provides an accounting perspective on the inventory computation calculation and the difference between enumeration and inventory computation. This article also provides, by a case study, an example of how the insured's physical controls and accounting methods and inventory processes play a significant role in the accuracy and reliability of inventory computation methods, as well as a possible alternative method of calculation. The purpose is to obtain an accounting perspective to compare enumeration to inventory computation methodologies and the range of inventory processes in between.

Enumeration _____ Inventory
Computation

B. INVENTORY PROCESS

“In the world of accounting, inventory is merchandise being held for resale.”⁹² However, in the world of employee dishonesty coverage, the term "inventory" is used to refer to any asset worth stealing, such as the following:

- Loose gems – at a jewelry manufacturer
- Cash in vault – at a bank, casino, or credit union
- Scrap – at a scrap yard or manufacturing facility
- Raw materials—at a manufacturing facility
- Food—at an institution or school
- Grain—in a warehouse
- Cattle--in a feed lot

In the world of employee dishonesty coverage, inventory recording methodologies and inventory accounting methodologies, whether an enumeration or a computation, are frequently used to calculate the loss due to employee dishonesty. However, in the accounting world, inventory recording and accounting methodologies are used to provide two items of information for the insured: (1) cost of goods sold for income statement preparation and tax returns, and (2) ending inventory for balance sheets and tax returns. The objective of the accounting realm

⁹² BILLIE M. CUNNINGHAM, ET AL., ACCOUNTING INFORMATION FOR BUSINESS DECISIONS (2000).

is to accurately reflect the results of a company within generally accepted accounting principles and, if possible, obtain the best possible, legal tax consequences.

In the insurance realm, the inventory processes are often used to determine the quantum of missing assets by contending that: (1) actual physical ending inventory is less than it should be, or (2) cost of goods (or gross profit) is higher (lower) than it should be. “The inventory process is dependent upon the manipulation of quantity and costs. How a company determines the loss is dependent upon: (a) the relationship among cost of goods available for sale, cost of goods sold, and cost of the year-end inventory, and (b) the concept of cost flow.”⁹³

A typical inventory cost flow is detailed as follows:

Beginning inventory
Plus purchases or product added
 Equals goods available
Less goods sold or removed
 Equals ending inventory

Each of the above entries is a variable upon which various assumptions are made, including but not limited to:

- Beginning inventory: Is it based upon pre- or post-freight costs? Is it based upon adjusted physical inventory counts? Is it based upon cycle counts?
- Purchases or product added: It can include cost of labor, freight, value added variables such as direct labor, raw material, processing, or expenditures. The purchase line for a manufacturer may be replaced with raw material purchases, direct labor, and manufacturing overhead. Are the costs actual, standardized, or internal transfer costs?
- Cost of goods sold: This variable is greatly affected by whether the insured uses a perpetual or periodic inventory method.

One commentator has described the distinction between the perpetual inventory system and the periodic inventory system as follows:

A perpetual inventory system keeps a continuous record of the cost of inventory on-hand and the cost of inventory sold. Under the perpetual inventory system, when a company purchases an item of inventory, it increases the asset inventory or raw material, of any item claimed, by the invoice cost of the merchandise plus other applicable charges. Because of computer technology, many industries, such as retail stores, use a perpetual inventory system. The computer system simultaneously increases cash (or accounts receivable) and sales

⁹³ CUNNINGHAM, *supra* note 92, at 283.

revenue for the item's sales price, reduces inventory and increases cost of goods sold by the amount of that item's cost, and updates the count of the quantity of inventory on-hand.⁹⁴

. . . . A *periodic* inventory system does *not* keep a continuous record of the on-hand and sold (removed), but it determines the inventory at the end of each accounting period by physically counting. Because a periodic inventory system does not reduce the inventory account on an ongoing basis, the only time the company knows the cost of its inventory or the cost of goods sold is when it counts inventory.⁹⁵

Under both perpetual and periodic methods, it is common for physical inventories to be taken. The purpose of physical inventory counts differs depending upon the accounting system applied by the insured. The difference between the book inventory amount and the physical inventory amount will serve different purposes. The major purpose is the calculation of cost of goods sold under the periodic process.

Purpose	Perpetual	Periodic
Cost of goods sold or removed	No	Yes
Accuracy of standardized cost, quantity, or other difference due to the perpetual process	Yes	No
Theft, normal shortages	Yes	Yes
Spoilage	Maybe	Yes
Yield lost	Maybe	Yes

- Ending inventory: Is it based upon book or physical inventory? Was the count a complete physical, cycle, sample, or estimate? Were the proper cutoff practices applied? How were the values determined?

Expanding the use of inventory processes, with its multitude of variables, from the “traditional” accounting realm to the “insurance” realm has led to much ado over what constitutes an inventory computation versus an enumeration, as well as accuracy and reliability of an inventory computation, when the courts apply or allow methods other than enumeration.

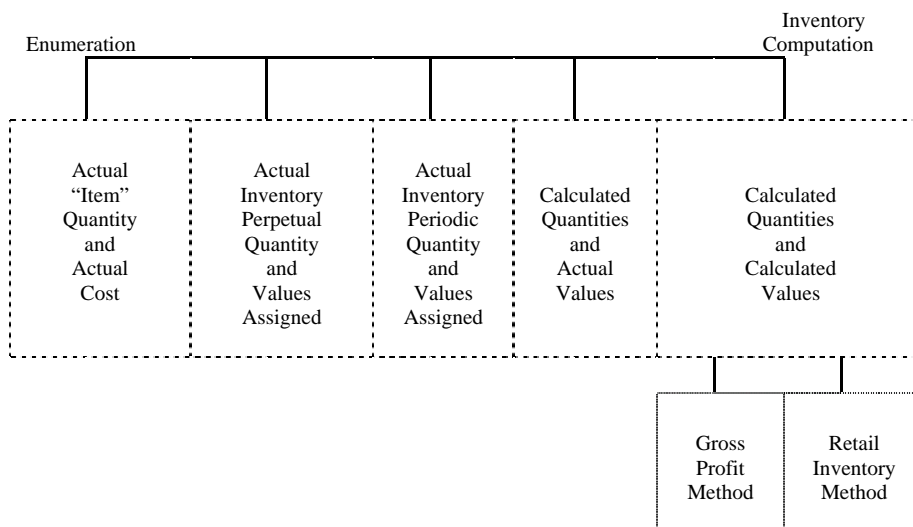
⁹⁴ CUNNINGHAM, *supra* note 92, at 173-74.

⁹⁵ CUNNINGHAM, *supra* note 92, at 175.

The following section of this article is a discussion and comparison between enumeration and inventory computation processes. The article also addresses inventory and accounting processes along the range of enumeration to inventory computation.

C. ENUMERATION VERSUS INVENTORY COMPUTATION

The challenge in understanding the differences between enumeration and inventory computation is to understand that, as we move from enumeration, more estimates are utilized for the four variables of an inventory process: beginning inventory, purchases, cost of goods sold, and ending inventory. We will discuss in further detail each of the following inventory processes:



1. Enumeration

The word "enumeration" is a legal concept, with little or no reference in Generally Accepted Accounting Principles. Enumeration has been explained by one courts as follows:

In the instant case, plaintiff proved that the items in question were received by plaintiff and were not sold in the usual course of business. Plaintiff also proved that the items were kept in a locked area accessible by two employees other than the owners of the business. Although there is proof that plaintiff's business was somewhat unorganized, the fact remains that the items were purchased by plaintiff, were not sold by plaintiff, were kept under

lock and key, were not found in inventory, and were accessible by only two employees.⁹⁶

In the accounting realm, for enumeration to occur, the four variables of beginning inventory, purchase or product added, cost of goods sold or removed, and ending inventory must, at a minimum, record and track all four variables at “actual” quantity and “actual” cost values. Actual cost value considers the actual price paid for each product in inventory. The inventory values, cost of goods sold, and purchases is then the sum of these actual individual unit costs.

Actual inventory occurs mostly with low volume purchases and sales and expensive, unique items, such as jewelry and automobiles. The pure, exact enumeration without physical or accountancy errors can be used to give a specific cost to a specific item for purchases, cost of goods sold, and ending inventory.

An example of common enumeration is the counting of cash in a teller drawer each evening. The ending balance is recorded as to the number of ones, tens, fives, and so on. The next morning, and all transactions during the day, give an actual accounting of ones received and disbursed, fives received and reimbursed, checks received, and so on. The actual costing method allows a teller to know the actual amount in his drawer, by denomination, with no or only insignificant differences. However, an enumeration does not eliminate the possibility of errors.

For the comparison and ranking of inventory computation along the scale between enumeration and inventory computation, we will use “Tommy's T's,” a T-shirt shop. Assume Tommy's T's has a beginning inventory of \$0 on January 1, 2000. During the year, Tommy's T's buys and sells various shirts. At year-end December 31, 2000, Tommy's T's takes an inventory and compares it to the book inventory. Using the enumeration method-actual cost, we get:

⁹⁶ *Strings & Things in Memphis, Inc. v. State Auto Ins. Cos.*, 920 S.W.2d 652 (Tenn. 1995).

ACTUAL QUANTITY AND ACTUAL COST													
Inventory										Cost of Goods Sold			
1/1 Beginning Balance					\$0								
1/4 Purchases					3/1 Sales								
A ₁	15	X	\$30	=	\$450	A ₁	5	X	\$30	=	\$150	A ₁	\$150
B ₁	10	X	25	=	250								
C ₁	<u>5</u>	X	5	=	<u>25</u>	C ₁	<u>5</u>	X	5	=	<u>25</u>	C ₁	25
Total	<u>30</u>				<u>725</u>	Avg.	<u>10</u>				<u>175</u>		
6/1 Purchases					9/1 Sales								
A ₂	15	X	40	=	600	A ₂	10	X	40	=	400	A ₂	400
B ₂	10	X	20	=	200	B ₁	5	X	25	=	125	B ₁	125
C ₂	<u>5</u>	X	10	=	<u>50</u>	C ₂	<u>1</u>	X	10	=	<u>10</u>	C ₂	10
Total	<u>30</u>				<u>850</u>	Avg.	<u>16</u>				<u>535</u>		
12/31 Balance													
A ₁	10	X	\$30	=	\$300							<u>\$710</u>	
A ₂	5	X	40	=	200								
B ₁	5	X	25	=	125								
B ₂	10	X	20	=	200								
C ₂	<u>4</u>	X	10	=	<u>40</u>								
Total	<u>34</u>				<u>\$865</u>								

Therefore, the book inventory equals the physical inventory because the physical inventory processes utilize actual quantity and actual cost (not estimated):

	Amount
Beginning inventory	\$0
Plus: purchases	1,575
Goods average	1,575
Less: cost of goods	710
Ending inventory	\$865

2. Actual Inventory with Perpetual Quantity and Values Assigned

Moving from enumeration to inventory computation involves changing one of the four variables--beginning inventory, purchases, cost of goods sold, and ending inventory--of the inventory process to a valuation method other than actual costs. Business decision-makers often decide it is cost prohibitive for high volume and inexpensive goods to be kept on an actual cost (enumeration) system. The most common method to apply is one of three basic ways that values of inventory can be assigned, other than actual cost:

1. LIFO (last in, first out) applies the latest price to items sold or transferred;
2. FIFO (first in, first out) is the reverse of LIFO, or
3. Weighted average method of inventory valuation considers the quantity of each product at different unit prices. The average price is weighted according to the quantity of products purchased at a price.⁹⁷

Given the Tommy's T's examples, let's illustrate how applying LIFO inventory values and actual quantity can affect ending inventory and cost of goods sold, variables of the inventory processes.

⁹⁷ JACK D. NINEMEIER & RAYMOND S. SCHIMIDGALL, BASIC ACCOUNTING STANDARDS 73 (1984).

ACTUAL QUANTITY AT LIFO VALUE WITH PERPETUAL CHECK AND BALANCE WITH COST OF GOODS SOLD															
Inventory										Cost of Goods Sold					
1/1 Beginning Inventory										\$0					
1/4 Purchases															
	A ₁	15	X	\$30	=	\$450	3/1 Sales								
	B ₁	10	X	25	=	250		A ₁	5	X	\$30	=	\$150	A ₁	\$150
	C ₁	5	X	5	=	25		C ₁	5	X	5	=	25	C ₁	25
	Total	30				725		Avg.	10			175			
6/1 Purchases															
	A ₂	15	X	40	=	600	9/1 Sales								
	B ₂	10	X	20	=	200		A ₂	10	X	40	=	400	A ₂	400
	C ₂	5	X	10	=	50		B ₂	5	X	20	=	100	B ₂	100
	C ₂	1	X	10	=	10		C ₂	1	X	10	=	10	C ₂	10
	Total	30				850		Avg.	16			510			
12/31 Balance															
	A ₁	10	X	\$30	=	\$300								\$685	
	A ₂	5	X	40	=	200									
	B ₁	10	X	25	=	250									
	B ₂	5	X	20	=	100									
	C ₂	4	X	10	=	40									
	Total	34				\$890									

	<u>Amount</u>
Beginning inventory	\$0
Plus: purchases	<u>1,575</u>
Goods average	1,575
Less: cost of goods	<u>685</u>
Ending inventory	<u><u>\$890</u></u>

In comparison to using the inventory value on a LIFO basis:

	ACTUAL	LIFO (Perpetual)
Ending Inventory	\$865	\$890
Cost of Goods Sold	\$710	\$685

The above is what can happen if prices are falling and the LIFO valuation is used on a perpetual basis.

3. Actual Inventory with Periodic Quantity and Values Assigned

The next move along the continuum is to illustrate an actual count of ending inventory and assume inventory is not tracked perpetually when sold, but periodic inventory is taken. Using the LIFO method, we value the ending inventory after we take a physical count. Using LIFO, we apply values:

Type	Quantity		LIFO Value		Amount
A	15	X	\$30	=	\$450
B	10	X	25	=	250
C	5	X	20	=	100
C	4	X	10	=	40
Total	34				\$840

	<u>Amount</u>
Beginning inventory	\$0
Plus: purchases	<u>1,575</u>
Goods average	1,575
Less: cost of goods	<u>840</u>
Ending inventory	<u><u>\$735</u></u>

As illustrated, the quantity of inventory sold was not recorded by the above inventory processes because the inventory was not tracked. The cost of goods sold variable is an unknown and is calculated as a “plug” of \$735, with no check and balance features.

	ACTUAL	LIFO (Perpetual)	LIFO (Periodic)
Ending Inventory	\$865	\$890	\$840
Cost of Goods Sold	\$710	\$685	\$735

4. Calculated Quantum and Application of Actual Values

The next step along the continuum is the calculated quantum and application of actual values. This method is often utilized with precious metal scrap or reclamation. The insured uses sales, cost of goods sold, or production volume and applies a percentage to calculate the amount of scrap that should be in inventory. Often the insured will apply a known cost value as of the date of discovery to calculate a dollar value.

For example, Tommy's T's may contend that for every \$100 in ending inventory there is about \$1, or 1%, which is soiled or damaged and should be sold at a discount. If the insured has \$890 in ending inventory, it contends \$8 in shirts is on the "discount rack."

Unfortunately, applying a percentage is no proof the scrap inventory exists. Depending upon the validity of the base number (sales, cost of goods sold, or production) can dictate the reliability of the computation.

5. Calculated Quantities and Calculated Values—Gross Profit Method

The next position on the continuum is for those companies that use either the gross profit or retail methods to calculate ending inventory. Over an extended period of time, the methods are often used for determining:

Ending inventory,
Cost of goods sold, and
Beginning inventory for the next period.

The only variable that appears not to be affected by this calculation may be purchases.

Using Tommy's T's as a basis, we will assume for the year:

Calculated Quantities and Calculated Values Gross Profit Method			
Sales		\$2,130	
Cost of goods sold			
Beginning inventory	\$0		
Net purchases	<u>1,575</u>		
Goods available	1,575		
Less: ending inventory (3)	<u>865</u>	(Estimate)	
Cost of goods		<u>710</u>	(2) 1/3 (Estimate)
Gross profit		\$1,420	(1) 2/3 (Estimate)

The first step is to calculate the historical gross profit as a percentage of sales (\$2,130 x 2/3). For step 2, we then apply gross profit to sales to determine cost of goods sold, again, a calculation, as well as estimating ending inventory at \$865 (\$1,575 - \$710). The gross profit method is, at best, an estimate of the cost of inventory.

6. Calculated Quantities and Calculated Values--Retail Inventory Method

The last step in the continuum is the retail inventory method. This method is used to estimate the cost of inventory by multiplying the retail value of ending inventory by the cost to retail ratio of the current period. Physical inventory is taken at retail values. The fallacy in the first step is that the assumption inventory will sell at the recorded inventory value. The retail value is an estimated valuation and not an actual cost.

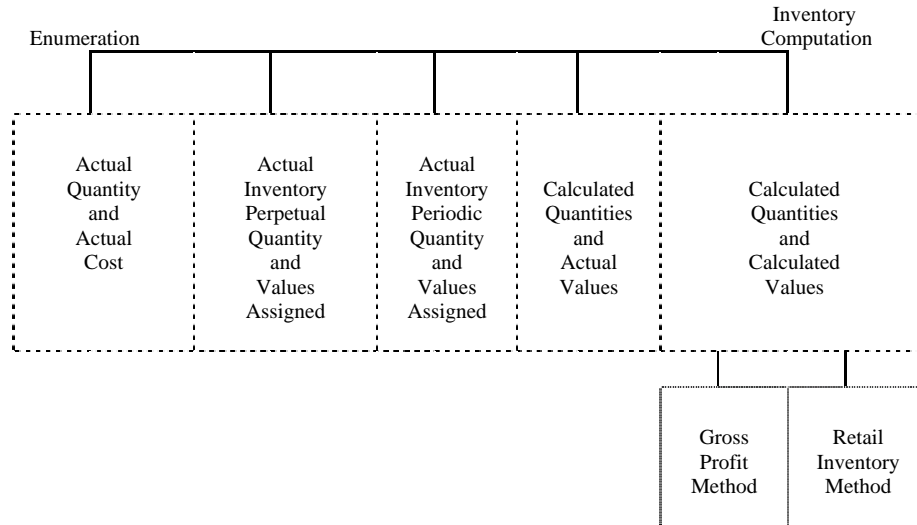
Calculated Quantities and Calculated Values Retail Inventory Method				
	Cost		Retail	
Beginning inventory	\$0		\$0	
Purchases	1,575		4,725	
Goods available	1,575		4,725	(1)
Cost to retail ratio	$\frac{1,575}{4,725}$	= 1/3		(2)
Less: sales			2,130	
Ending inventory at retail			\$2,595	(3)
Ending inventory at cost (1/3 X \$2,595)	\$865			(4)

The retail method is only slightly better than the gross profit method in that the insured must take a perpetual physical inventory at retail value. A company uses the retail inventory method to estimate the cost of its inventory, \$865, by multiplying the retail value of the ending inventory, \$2,595, by the cost-to-retail ratio (1/3) of the current period.

The gross profit method and the retail method are similar because they both estimate the cost of inventory by using a profit percentage. However, the retail inventory method is more sensitive to price changes because it uses a current period estimate of the profit percentage, whereas the gross profit method uses an estimate based upon past periods.⁹⁸

⁹⁸ CUNNINGHAM, *supra* note 92, at 679.

7. Summary of Enumeration Compared to Inventory Computation



As we move from enumeration to inventory computation, the inventory process utilizes more estimates for the four variables of an inventory calculation beginning inventory, purchase or product added, cost of goods sold or removed, and ending inventory. If the insured does not track actual quantity, number of items and not the values, the insured is required to make more estimates with less accurate information. It is common for a company's accounting system to report a quantity of inventory that differs from its physical inventory count. The most common cause of differences (inventory shrinks) is the failure to account for phenomena that are created by the periodic system, perpetual system assigned values, or calculated values which are not properly booked as operating variances.⁹⁹

D. BOVINE BEEF CASE STUDY

The attached case study of Bovine Beef illustrates how a company's gross profit calculation does not allow for separate diagnostic and correction mechanisms in place to determine why the inventory discrepancies occurred.

⁹⁹ James A. Krupp, *Avoiding Inventory Shrinks*, in *MANAGEMENT ACCOUNTING* 33-5 (Feb. 1999).

1. Background

Bovine Beef, Inc.¹⁰⁰ is a beef purveyor. Bovine's clientele consists mostly of high-end restaurants and gourmet grocers. Bovine is primarily a "custom house," ordering and preparing beef to the customer's specifications. Bovine does deal in some prepackaged and some frozen product sales, in addition to the custom sales. The company has been in existence since 1935 and is incorporated in the State of Iowa, as a Subchapter S corporation. The business has been headquartered in Midtown, Iowa for six years. Bovine Beef also has five other locations: West City, Garden Lakes, Smithtown, Fort Green, and Marathon. The claimed loss occurred at the Midtown location.

A review of the proof of loss reveals that Bovine Beef claimed a date of discovery of December 12, 2000, when the video cameras captured the employees misappropriating inventory. Bovine categorizes inventory as fresh or frozen beef. Approximately 95-100 percent of the inventory purchases is fresh beef. Bovine takes a physical inventory of fresh beef and frozen beef once a month but keeps no records. Physical inventory is taken monthly by management personnel. Bovine purchases fresh beef from large commercial farms, small farms, or Bovine's farms that are operated by independent contractors. Bovine records all purchases. Bovine prepares and sells beef as fresh or frozen. Bovine's inventory cost flows are as follows:

Fresh Beef Beginning Inventory (Per End of Month Physical Inventory Count)	
Plus: All Purchases	
<u>No</u> Adjustments for Lost Yield (40-60%) <u>No</u> Adjustments for Sales of Fresh Beef <u>No</u> Waste or Spoilage Adjustment	
Fresh	Frozen
	Beginning Inventory Amount (Per End of Month Physical Inventory Count)
	Plus: Recorded Incoming Quantity (From Fresh and Purchases)
	Less: Recorded Outgoing Quantity
	Equals: End of Month Book Inventory
Less: End of Month Physical Inventory	Less: End of Month Physical Inventory
Equals: Calculated Cost of Goods Sold	Equals: Book to Physical Adjustment

Bovine Beef supposedly records all incoming and outgoing frozen beef transactions. However, for the fresh beef, Bovine does not record or adjust for:

Lost Yield = When beef is skinned, cleaned, de-boned, and so on.
Bovine indicated yield can be 35-45%. In other words, 100 pounds of

¹⁰⁰ Hereinafter Bovine.

fresh beef will yield 40 pounds of de-boned beef. The insured does not track or record beef yield or have historical records.

Waste or Spoilage = When beef becomes too old to sell or is mishandled or mispackaged and cannot be sold. Bovine contends waste or spoilage is nil. There are no historical records to verify Bovine's contentions.

Sales = The outgoing or reduction in fresh beef inventory.

Bovine has the following inventory and costs:

	Jan.	Feb.	Mar.
Beginning Inventory/ Ending Inventory	\$100	\$200	\$300
Purchases (recorded)	1,000	800	1,100
Ending Inventory (counted)	(200)	(300)	(400)
Estimated Cost of Goods	\$900	\$700	\$1,000

The cost of goods recorded includes:

- Cost of sales (cost of beef frozen or fresh beef sold);
- Cost of lost yield for frozen and fresh;
- Cost of waste or spoilage; and
- Errors, irregularities, mis-shipments, miscounts, or timing differences.

Bovine contends that the gross profit from July 1, 1999, through December 31, 2000, was less than it should have been by \$1,923,983. Bovine computed sales for:

Sales for 12 months ended June 30, 2000	\$42,332,614
Sales for 6 months ended December 31, 2000	<u>\$17,605,344</u>
Total sales for 18 months ended December 31, 2000	<u>\$59,937,958</u>
Bovine contends they should make a gross profit margin of 20.06% of sales, or	\$12,023,554
Bovine contends they made a gross profit of only	<u>\$10,099,571</u>
Bovine contends a gross profit loss for 18 months, due to employee dishonesty, of	<u>\$1,923,983</u>

2. Analysis of Claim and Gross Profit Calculation

Bovine has submitted a gross profit calculation as a basis for the amount of employee dishonesty loss. Bovine's claimed amount may not take into account other reasons for a decline in gross profit (increase in cost of goods sold), such as cost of goods percentage of beef due to increase in factors such as labor or other costs, timing differences between purchases and sales, and change in product manufacturing mix.

First, we noted Bovine's claim is based upon a percentage of sales rather than dollars per pound. Based upon this limitation, the cost per pound was sampled for the four most sold items to determine if Bovine had a consistent, homogenous profit margin for each product sampled:

	1999	2000		1999	2000
T-Bone	17.9%	17.4%	Ribeye	14.6%	13.7%
Sirloin	20.1%	19.9%	Chuck Roast	30.9%	30.1%

The analysis indicates Bovine did not have a consistent profit margin for each product sampled. We noted the sales price fluctuations were not consistent or proportionate to cost fluctuation. Thus, the profit earned from month to month varies somewhat. Therefore, it is difficult for Bovine to support an average gross profit percentage of 20.06%, as claimed. It is uncertain as to the source of the 20.06% calculated by Bovine.

As indicated, the gross profit method to estimate ending inventory is based upon historical results. As noted, the gross profit appears to decrease. One possible explanation is that the supplier or internal operations are passing on costs that have not been accounted for in the selling price.

The second analysis reviews the timing difference between purchases and sales. Bovine indicated it purchases some items when they are in season and sells them later. Bovine contends 65-70% of their sales occurred between October and Mother's Day. The weighted average of purchases, cost of goods, and sales, from December 1st to April 30th, are 53.7%, 58.5% and 52.7%, respectively. Of their annual totals, a 5.8% (58.5%-52.7%) timing difference between sales and purchases causes an excess cost of goods of \$1,613,656.77 (\$27,821,668.41 * 5.8%). The difference could be timing and allocation. The difference in the weighted averages between cost and sales occurs each year in the December 1st to April 30th period. Bovine has included two of these periods (10 months) in their 18-month calculation. This bias probably explains the majority of the decrease in the gross profit.

The third analysis determines if the claimed increase in the cost of goods sold percentage is due to a change in product mix. Bovine contends gross profit should be an average of 22.49% and cost of goods sold 77.51%. However, gross profit was only 16.56% and 17.54% during the claimed period of July 1999 to December 2000. The analysis of the March 5, 2001, weekly price sheet shows that the cost of goods percentage varied greatly by product. Therefore, depending upon the makeup of purchases and product sales, the overall cost of goods sold percentage could vary.

For example:

Group A							
	Lbs.	Selling Price	Cost		Total Sales	Total Cost	COGS %
Chuck	100	\$9.25	\$6.39	=	\$925.00	\$639.00	
Sirloin	1,000	\$8.95	\$7.02	=	\$8,950.00	\$7,020.00	
Total	1,100				\$9,875.00	\$7,659.00	77.56%

Group B							
	Lbs.	Selling Price	Cost		Total Sales	Total Cost	COGS %
Chuck	1,000	\$9.25	\$6.39	=	\$9,250.00	\$6,390.00	
Sirloin	100	\$8.95	\$7.02	=	\$895.00	\$702.00	
Total	1,100				\$10,145.00	\$7,092.00	69.90%

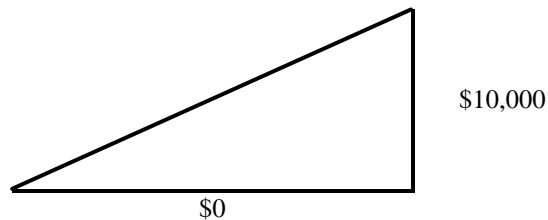
Because Bovine does not use actual inventory costs, a claimed average gross profit percentage of 22.49% is difficult to substantiate. For example, a 7.66% difference in the cost of goods sold percentage (77.56% - 69.90%) is \$3,242,678.23 (7.66% * \$42,332,614) increase in costs. This is just due to a possible change in product mix that is not accounted for by a cost variance in Bovine's records but is captured within the cost of goods sold amount.

As illustrated above, the case study shows the numerous problems and interpretations that can occur when inventory is calculated by a method other than enumeration. The enumeration method, at a minimum, would illustrate the quantity, by the pound, on a monthly basis:

	BI by Pound
+	Purchases and Returns by the Product by Pound
-	Production Yield or Units Lost in Production by Product (by Pound)
-	Spoilage by Produce (by Pound)
-	Waste and Scrap (by Pound)
-	Pounds by Product Sold + Frozen
-	Ending Inventory (Count Sheet by Pound)
=	Monthly Book to Physical Inventory Adjustment

3. Alternative Methods

Given the limitations of inventory computation, when there is evidence of employee dishonesty, it is often necessary to use alternative methods to determine the reasonable amount stolen. One possible method is to assume the misappropriation escalated over time until it reached the level at the time of discovery. Based upon the proof that the Bovine employees were stealing for 18 months, per confessions, and they stole approximately \$10,000 in the last week of their employment, we project using time and amount to calculate 78 weeks times \$10,000 times $1/2 = \$390,000$.



Common sense and affidavits would support the application of above triangulation method, based upon the facts presented.

IV. Summary

A majority of jurisdictions now permit the use of inventory records to establish the amount of loss where there is independent evidence of employee dishonesty. When an insurer handles a claim in such a jurisdiction, this article can be used as a resource to determine where the insured's inventory processes lie between enumeration and inventory computation. In addition, the attached table of cases can serve as a resource to help determine whether the jurisdiction in which the claim is presented permits the use of inventory records to establish the amount of loss once independent evidence of employee dishonesty has been presented.

Table of Cases

Jurisdiction	Style of Case	Citation
Alabama	<i>American Fire and Cas. Co. v. Burchfield</i>	232 So. 2d 606 (Ala. 1970)
Arizona	<i>J.R. Norton Co. v. Fireman's Fund Ins. Co. of N.Y.</i>	569 P.2d 857 (Ariz. Ct. App. 1977)
Arkansas	<i>Fort Smith Tobacco & Candy Co. v. American Guar. and Liab. Ins. Co.</i>	208 F. Supp. 224 (W.D. Ark. 1962)
California	<i>Prager & Bear, Inc. v. Fed. Ins. Co.</i>	136 Cal. Rptr. 340 (Cal. Ct. App. 1977)
District of Columbia	<i>Alexandre of London, Washington, D.C. v. Indemnity Ins. Co. of North America</i>	182 F. Supp. 748 (D. D.C. 1960)
Georgia	<i>Fidelity and Deposit Co. of Maryland v. Southern Utilities, Inc.</i>	726 F.2d 692 (5 th Cir. 1984)
	<i>Sun Ins. Co. of New York v. Cullum's Men's Shop, Inc.</i>	331 F.2d 988 (5 th Cir. 1964)
	<i>Savannah Wholesale Co. v. Continental Cas. Co.</i>	279 F.2d 706 (5 th Cir. 1960)
	<i>Atlanta Coca-Cola Bottling Co. v. Transamerica Ins. Co.</i>	61 F.R.D. 120 (N.D. Ga. 1973)
Idaho	<i>Morrow Retail Stores, Inc. v. Hartford Acc. & Indem. Co.</i>	111 F. Supp. 772 (D. Idaho 1953)
Illinois	<i>Gaytime Frock Co. v. Liberty Mut. Ins. Co.</i>	148 F.2d 694 (7 th Cir. 1945)
	<i>Blitz Corp. v. Hanover Ins. Co.</i> No. 95-C2725	1996 WL 308233 (N.D. Ill. 1996)
	<i>Barr Co. v. Safeco Ins. Co. of America</i> No. 83-C2711	1988 WL 64558 (N.D. Ill. 1988)
	<i>Gillette Co. v. Travelers Indem. Co.</i>	365 F.2d 7 (N.D. Ill. 1966)
	<i>Reedy Industries, Inc. v. Hartford Ins. Co. of Illinois</i>	715 N.E.2d 728 (Ill. App. Ct. 1999)
	<i>Julian Foundry Co. v. Fid. & Cas. Co. of New York</i>	124 N.E.2d 48 (Ill. App. Ct. 1955)
Kansas	<i>Leader Clothing Co., Inc. v. Fid. and Cas. Co. of N.Y.</i>	237 F.2d 7 (10 th Cir. 1956)
Louisiana	<i>American Drug Stores, Inc. v. Home Indem. Co.</i>	222 So. 2d 512 (La. 1969)

Jurisdiction	Style of Case	Citation
	<i>Harris W. Hall Co. v. Security Ins. Co.</i>	289 So. 2d 832 (La. Ct. App. 1974)
	<i>Gulf Enterprises, Inc. v. Phoenix Ins. Co.</i>	267 So. 2d 733 (La. Ct. App. 1972)
	<i>Jefferson Cold Storage, Inc. v. Phoenix Ins. Co.</i>	309 So. 2d 727 (La. Ct. App. 1972)
	<i>Service Enterprises, Inc. v. Nat'l Sur. Co.</i>	149 So. 2d 149 (La. Ct. App. 1963)
	<i>Standard Brass & Mfg. Co. v. Maryland Cas. Co.</i>	153 So. 2d 475 (La. Ct. App. 1963)
	<i>Purity-Reiss Candy Co. v. Maryland Cas. Co.</i>	128 So. 2d 677 (La. Ct. App. 1961)
Massachusetts	<i>Popeo v. Liberty Mutual Ins. Co.</i>	343 N.E.2d 417 (Mass. 1976)
	<i>Cambridge Trust Co. v. Commercial Union Ins. Co.</i>	591 N.E.2d 1117 (Mass. App. Ct. 1992)
Michigan	<i>NIB Foods v. Ins. Co. of North America</i>	234 N.W.2d 725 (Mich. 1975)
Mississippi	<i>Gotcher Engineering & Mfg. Co. v. United States Fid. & Guar. Co.</i>	193 So. 2d 115 (Miss. 1966)
	<i>McGee v. Maryland Cas. Co.</i>	127 So. 2d 656 (Miss. 1961)
	<i>Hartford Acc. & Indem. Co. of Hartford, Conn. v. Hattiesburg Hardware Stores</i>	49 So. 2d 813 (Miss. 1951)
Missouri	<i>Lumbermen's Mut. Cas. Co. v. Norris Grain Co.</i>	343 F.2d 670 (8 th Cir. 1965)
	<i>Chenoweth-Chapman Corp. v. American Ins. Co.</i>	553 S.W.2d 872 (Mo. 1977)
	<i>Meyer Jewelry Co. v. General Ins. Co. of America</i>	422 S.W.2d 617 (Mo. 1968)
	<i>Lock Distributing Co. v. Hartford Acc. and Indem. Co.</i>	407 S.W.2d 658 (Mo. 1966)
	<i>Mid-Continent Stores, Inc. v. Cent. Sur. & Ins. Corp.</i>	377 S.W.2d 567 (Mo. 1964)
Nebraska	<i>Jones v. Employers Mut. Cas. Co.</i>	432 N.W.2d 535 (Neb. 1988)
	<i>Paramount Paper Products Co. v. Aetna Cas. and Sur. Co.</i>	157 N.W.2d 763 (Neb. 1968)

Jurisdiction	Style of Case	Citation
Nevada	<i>Mapes Casino, Inc. v. Maryland Cas. Co.</i>	290 F. Supp. 186 (D. Nev. 1968)
New Jersey	<i>Hoboken Camera Center, Inc. v. Hartford Acc. & Indem. Co.</i>	226 A.2d 439 (N.J. Super. Ct. App. Div. 1967)
	<i>Reese Cadillac Corp. v. Glens Falls Ins. Co.</i>	157 A.2d 331 (N.J. Super. Ct. App. Div. 1960)
New Mexico	<i>Cy Anschutz and Associates v. Conley</i>	393 P.2d 710 (N.M. 1964)
New York	<i>Dunlop Tire & Rubber Corp. v. Fid. and Deposit Co. of Maryland</i>	479 F.2d 1243 (2 nd Cir. 1973)
	<i>Dawson Indus., Inc. v. Affiliated FM Ins. Co.</i>	145 F.R.D. 327 (S.D.N.Y. 1992)
	<i>United States Smelting Ref. and Mining Co. v. Aetna Cas. & Sur. Co.</i>	372 F. Supp. 489 (S.D.N.Y. 1974)
	<i>New York University v. Continental Ins. Co.</i>	639 N.Y.S.2d 283 (N.Y. 1995)
	<i>Ace Wire & Cable Co., Inc. v. Aetna Cas. & Sur. Co.</i>	469 N.Y.S. 655 (N.Y. 1983)
	<i>American Thermostat Corp. v. Aetna Cas. and Sur. Co.</i>	399 N.Y.S. 292 (N.Y. 1977)
	<i>Kaplan Jewelers v. Ins. Co. of North America</i>	383 N.Y.S.2d 127 (N.Y. 1975)
	<i>Kernwood Mfg. Corp. v. Home Indem. Co.</i>	317 N.Y.S.2d 113 (N.Y. 1970)
North Carolina	<i>National Shirt & Hat Shops of Carolinas v. American Motorists Ins. Co.</i>	68 S.E.2d 824 (N.C. 1952)
Ohio	<i>Sucher Packing Co. v. Manufacturers Cas. Ins. Co.</i>	245 F.2d 513 (6 th Cir. 1957)
	<i>Sommer v. General Ins. Co. of America</i>	259 N.E.2d 142 (Ohio Ct. App. 1970)
Pennsylvania	<i>York Lumber Co. v. Fid. and Deposit Co. of Maryland</i>	331 F. Supp. 1131 (E.D. Pa. 1971)
	<i>Movie Distributors Liquidating Trust v. Reliance Ins. Co.</i>	595 A.2d 1302 (Pa. Super. Ct. 1991)
	<i>Stadham Co. v. Century Indem. Co.</i>	74 A.2d 511 (Pa. Super. Ct. 1950)

Jurisdiction	Style of Case	Citation
Rhode Island	<i>Danal Jewelry Co. v. Fireman's Fund Ins. Co.</i>	264 A.2d 320 (R.I. 1970)
Tennessee	<i>Strings & Things in Memphis, Inc. v. State Auto Ins. Companies</i>	920 S.W.2d 652 (Tenn. Ct. App. 1995)
Texas	<i>New Amsterdam Cas. Co. v. W.D. Felder Co.</i>	214 F.2d 825 (5 th Cir. 1954)
	<i>Cobb v. American Bonding Co. of Baltimore</i>	118 F.2d 643 (5 th Cir. 1941)
Washington	<i>Hanson PLC v. Nat'l Union Fire Ins. Co. of Pittsburgh, PA</i>	794 P.2d 66 (Wash. Ct. App. 1990)
Wisconsin	<i>Tri-Motor Sales, Inc. v. Travelers Indem. Co.</i>	119 N.W.2d 327 (Wisc. 1963)
Wyoming	<i>Security Ins. Co. of Hartford v. Wilson</i>	800 F.2d 232 (10 th Cir. 1986)