Business Interruption Insurance
—what your should know right now

If a natural or man-made disaster interrupted your company's or client's business—would it survive? What may have seemed like protection for "someone else's business" may now be worth serious consideration.

Some time ago, we briefed our 30,000 members on the basics of business interruption insurance in their free monthly technical briefing, *The General Ledger* (www.aipb.org/general_ledger.html). Details on your September 2005 briefing are at the end of this e-letter.

Here's how business interruption insurance works, courtesy of Donald J. Dragony, CPA, CFO/VP of Finance and Manager of Business Interruption Claims, Alex N. Sill Co., Cleveland, Ohio.

The basics

Business interruption insurance covers loss of income from fire or other interruptions ("perils"). It pays the expenses needed to keep a firm open and put in the condition it would have been in were there no such loss. With inadequate or no coverage, income and cash flow may stop. CPAs and even some insurance agents do not fully grasp this insurance, so if you do, you may save your firm.

The most popular kinds of business interruption (or "loss of income") insurance are based on either gross earnings or net income. Both use the same coverage (loss) calculation and arrive at the same result.

The "gross earnings" method, for insurance purposes, is net sales less those expenses you would not incur during the loss period because you did not manufacture, e.g., raw materials. Direct labor and overhead are included elsewhere in the loss calculation. It has nothing to do with similar accounting terms.

If a firm has an interruption, it must determine how long the interruption will last and how much it will lose based on historical data and estimates. The loss period is the time it takes to restore the property to the condition it was in right before the loss *using due diligence and dispatch*—a subject of frequent disputes between insured and insurer.

Here are the terms used in the calculation:

- *Gross sales* is the manufacturer's sales value of the production for the "loss period." It can be based on historical sales and production (generally 2 or 3 years) and incorporates changes in the economy that would have increased or decreased sales.

- *Sales deductions* may include discounts, prepaid freight, commissions, bad debts, sales tax, and other items that would reduce gross revenue and generally have a direct relationship to sales.

- *Net sales* are lost sales less sales deductions.

- *Gross earnings deductions* include raw materials, consumable supplies, outside services, and other items considered uninsurable because their cost is not incurred (or not necessary) when sales are lost.

- *Noncontinuing (discontinued or saved) expenses* are expenses that would have occurred without the interruption less actual continuing expenses for the loss period. Gross earnings less noncontinuing expenses yield the business interruption loss.

Exhibit 1—Basic calculation for a business interruption loss

Many firms discover coinsurance, the result of not purchasing enough insurance, when negotiating with an insurer after a loss. Often, the problem is failure to understand how to correctly calculate gross earnings. For example, suppose ABC Co. mistakenly bases how much insurance to buy on its income statement.

Exhibit 4—*Correct* calculation of ABC's 100% interruption coverage	
Sales	$20,000
Gross earnings deductions: Raw Materials	(6,000)
Gross earnings	$14,000
Contribution percentage	x 50%
Insurance required	$ 7,000

Note that "insurance required" is closer to "gross profit" on the income statement (Exhibit 2) than to net income. A comparison of the two calculations shows that the difference in coverage purchased is 75%.

Exhibit 5—Comparison of coverage calculations		
	Incorrect method (Exhibit 3)	**Correct method** (Exhibit 4)
Sales	$20,000	$20,000
Less: cost of sales	(12,000)	
Gross earnings deductions		(6,000)
Annual gross profit	$ 8,000	
Gross earnings		$14,000
x coinsurance % (contribution)	x 50%	x 50%
Insurance required	$ 4,000	$ 7,000

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To calculate insurance proceeds in a loss:

$$\text{Collectible percentage of loss} = \frac{\text{insurance in force}}{\text{insurance \% required}}$$

If ABC Co. incurs a loss from a business interruption, what percentage will be covered by this insurance? It depends on the method used to calculate coverage

Exhibit 6—% of future loss ABC Co. will collect

a. If coverage is based on net income:

$$\frac{\$4{,}000 \text{ insurance in force}}{57\% \text{ of loss collectible}} = \$7{,}000 \text{ insurance required}$$

b. If coverage is based on gross earnings:

$$\frac{\$7{,}000 \text{ insurance in force}}{100\% \text{ of loss collectible}} = \$7{,}000 \text{ insurance required}$$

For example, how much business interruption insurance will ABC Co. collect if a fire causes a $6,000 loss?

Exhibit 7—Amount collected on a $6,000 interruption loss

a. If ABC purchased $4,000 in coverage under the net income formula, it will collect $3,420 ($6,000 x 57%).

b. If ABC purchased $7,000 in coverage under the gross earnings formula, it will collect all $6,000.

The net income method
The net income method adds to net income insurable expenses. Because companies often miscalculate, Exhibit 8, Method A, shows the incorrect calculation; Method B shows the correct one.

Exhibit 8—ABC Co. calculation of required insurance: the net income method

	Method A	Method B
Net income	$2,000	$2,000
Insurable expenses: Raw material (Gross earnings deduction)	N/A	N/A
Direct labor (noncontinuing expenses)	-0-	4,000
Factory overhead (continuing expense)	2,000	2,000
Rent (Continuing expense)	2,000	2,000
Office salaries (continuing expense)	2,000	2,000
Supplies (noncontinuing exp.)	-0-	2,000
Total gross earnings	$8,000	$14,000
Coinsurance (contribution %)	x 50%	x 50%
Insurance required	$4,000	$ 7,000

Assumptions:
- In Method A, only net income and continuing expenses are insurable.

Method A illustrates a common error made when using the net income method to calculate coverage. It fails to include noncontinuing (or saved) expenses. For example, in a very brief, limited shutdown, a company may still incur normal direct labor costs. Method B is correct because it includes coverage for expenses that may continue depending on the extent of the loss. But either method used correctly yields the same amount of required insurance.

Additional considerations
There are endorsements (benefits or limitations) to consider in business interruption insurance. These include an agreed-upon amount that automatically eliminates potential coinsurance penalties, an ordinary-payroll exclusion (for firms with substantial direct labor costs) additional payroll coverage (e.g., key employee salaries), an extended period of indemnity (money for a period of time after property is restored), and various deductibles to choose from.

After coverage begins, there may be other factors to consider. Consult a business interruption insurance specialist.

Service firms may use the gross earnings formula omitting cost of sales and gross earnings. They would use costs and expenses and purchase an “actual-loss sustained” policy, which insures the firm for the actual loss incurred, not to exceed the face amount of the policy and frequently for a period not to exceed

Exhibit 9—Calculating business interruption insurance for service firms

	Gross sales
Less:	Sales deductions
Equals:	Net sales
Less:	Noncontinuing expenses
Equals:	Business interruption loss
Plus:	Extra expenses
Equals:	Total collectible business interruption loss and extra expenses

Often, service firms purchase different coverage, an “extra-expense policy,” that covers added costs incurred to stay open. An accounting or law firm does not typically lose clients in a fire, but may lose records. To stay in business, the firm needs coverage to recreate the lost files and lost records. They may also need temporary rental space and phone service, even computers, desks, etc. Since this kind of policy does not have a coinsurance provision, it requires a simpler calculation and estimation of maximum coverage needed.

This practical, useful information first appeared in *The General Ledger* newsletter