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H. C. Baker

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BY H. C. BAKER

A CERTIFIED public accountant frequently acts in a dual capacity. In the eyes of his client he may be looked upon not only as an expert auditor but also as a counselor, and his advice may be sought on a variety of subjects—not the least of which is fire insurance.

That there is a growing tendency in this direction was brought home to me quite forcibly a few months ago when I accompanied one of our agents on a call upon the head of a large retail establishment. This concern had a flourishing retail business in the heart of the medium-priced shopping district of an eastern city, but it occupied quarters in two unsprinklered brick buildings of the vintage of 1880—buildings which, in the event of fire, could have been gutted in an hour. The owners carried ample property-damage insurance, but nothing to protect themselves against the loss of *income* which would result from a total or partial shut-down.

Our purpose, therefore, was to interest this firm in what we call business-interruption insurance. We called our prospect's attention to his extreme vulnerability to loss by fire; to the drain which such a loss would put upon the "asset" side of his balance-sheet and to the fact that he could not well afford to discharge old and tried employees during a period of enforced idleness. We recited statistics from a well known reporting agency showing that of all firms which sustain severe fire losses 43 per cent are so crippled financially as to be unable to resume operations while an additional 38 per cent suffer some impairment of credit or scope of operation. These failures, we said, were not due to any lack of property-damage insurance (probably ample in most cases) but were rather the result of that "take-a-chance" attitude which overlooks the fact that the value of a property should be measured by the earnings which it is capable of producing and that, therefore, from an insurable standpoint, property and earnings are of equal importance.

Our prospect was quite impressed with our presentation but he informed us that he had already discussed the subject with his certified public accountant; that the latter had not recommended it; and that, owing to the confidence of the firm in the opinion and judgment of their accountant, it would be necessary for us to "sell" him before any decision could be reached. We immediately made an appointment with this gentleman, and discovered that many of his objections were based upon a rather sketchy knowledge which he had acquired years ago and long before the advent of the forms and rates being offered today. But he was open-minded and, once he had the facts before him, readily admitted his mistake. It took us just twenty minutes to convert a skeptic into an advocate of this form of indemnity; it also opened our eyes to the fact that accountants, as a class, might welcome some constructive thoughts on the subject.

Use-and-occupancy insurance has been studied, discussed, and written about by the best business brains in and out of the insurance business. It is usually the focal point of the insurance conferences of the American Management Association. Patently, it is impossible to give it adequate treatment in a short discourse but I shall nevertheless attempt to outline briefly its fundamental characteristics and leave to competent agents and brokers the task of supplying more detailed information.

There are several types of earnings insurance but my discussion will be limited to those usually written by fire-insurance companies, i.e., those resulting from the perils of fire, tornado, riot, explosion, aircraft and motor-vehicle property damage, and earthquake.

Use-and-Occupancy Insurance

Use-and-occupancy insurance is designed to support the financial structure of an enterprise by furnishing it, after an insured casualty (such as fire, tornado, and explosion), with an amount of money equal to the loss of profits, fixed charges, and expenses which would have been earned had no loss occurred. The amount is limited to the actual loss sustained for that period of time which would be required with the exercise of due diligence and dispatch to rebuild, repair, or replace the buildings, structures, machinery, and equipment insured.

First written sixty years ago, the forms of coverage have undergone numerous changes, all of which have been calculated to simplify, to broaden, and to make the policy more adaptable to the needs of the buying public. Today a variety of forms is available but as the use of some is restricted to individual states or groups of states, I have selected as a basis of discussion the 80 per cent coinsurance form (sometimes called the contribution form) which is in quite general use throughout the United States. With slight modification this form is adaptable to both mercantile and manufacturing risks.

The coverage clause is divided into two items, the first of which covers the net profits and continuing expenses of the business, excluding ordinary payroll. The second item, coverage of which is optional with the insured, insures the ordinary payroll for a period of ninety days (or longer, if desired). There are a number of interesting and important features of the coverage (highly important to the protection of the insured) to which I shall refer later, but for the present the chief interest in this form, from the accountant's viewpoint, is the amount of insurance required to be carried and the amount collectible in case of loss.

Getting right down to cases, therefore, we find the amount of insurance required to be carried as stated in the coinsurance clause to be, under item one, an amount not less than 80 per cent of the annual net profits and the annual amount of all charges and expenses of any nature, whether continuing or not, which would have been earned during the twelve months immediately following loss or damage by the insured casualty, except the cost of light, heat, and power and the entire ordinary payroll. Under item two, if coverage is desired, the insured is required to carry an amount equal to not less than 80 per cent of the insured's entire ordinary payroll which would have been earned during a period of at least ninety days immediately following the loss.

Let us assume that a manufacturing concern is in the market for a policy. The agent would supply a work sheet which might be filled out as follows:

Item 1

(1) Total income of the business for past 12 months derived through the use and occupancy of the building(s), machinery, equipment (and/or "stock" or "raw stock") to which the insurance will extend (including commissions, rents, or income from leased departments)	$900,000
(2) Deduct cost, less discounts, of raw stock entering into articles produced (if manufacturing risk) or cost, less discounts, of goods sold (if mercantile risk), for the period during which income (1) was derived	670,000
(3) 1 minus 2 leaves gross earnings	230,000

(4) Deductions: (a)	Cost of light, heat, and power. (These items are insured but should not be included when determining the amount of insurance)	$ 8,000	
(b)	Bad accounts	7,000	
(c)	Ordinary payroll (Including social-security and unemployment-insurance taxes and workmen's-compensation-insurance costs to the extent these items are based on ordinary payroll)	85,000	
	Total deductions		$100,000
(5)	3 minus 4 leaves amount of insurance required for item 1 of 100% contribution form		130,000
(6)	Amount of insurance required for item 1 of 80% contribution form (80% of amount of item 5)		104,000

NOTE.—If any variation in the income of the business for the next 12 months is anticipated, the amount shown under items 5-6-7-8 should be increased or decreased accordingly.

ITEM 2

(Optional)

(7)	Entire ordinary payroll of business, not including any salaries described as covered under item 1, for a period of ninety (90) consecutive days	$ 40,000

NOTE.—The sum entered under item 2 should be the full ordinary payroll for the 90 consecutive days in which the ordinary payroll is the largest, where 100% form is used.

(8)	Amount of insurance required for item 2 of 80% contribution form (80% of item 7)	32,000

Now the policy states that, in determining the amount of any loss, due consideration shall be given to the experience of the business before the fire and the probable experience thereafter. Thus, it will be seen that, since policies are usually written for terms of one or three years, it is incumbent upon the insured to watch his month-to-month earnings and to make whatever adjustment in the amount of his use-and-occupancy insurance as may be required. In the event of any sharp increase in business, failure to do so would make him a coinsurer for the deficit while a decline would result in overinsurance. Admittedly, many concerns do not make a balance-sheet every month; total sales and the ordinary payroll are, however, good barometers of business trends. Using these as a guide, management officials should in most cases be able to forecast the approximate amount of earnings to be derived from the business during any future season and any leeway to be provided for error, should, of course, preferably produce overinsurance rather than an insufficiency.

An examination of the work sheet will show that in accordance with the conditions of the coinsurance clause the insured must carry an amount of insurance which is really equal to gross earnings less ordinary payroll and light, heat, and power; it will also show that this figure includes some items of noncontinuing expense for which no loss would be incurred in the event of a total shut-down. There is a vast difference, however, between continuing expenses under total and partial loss conditions. Rent, for example, if abated after a total loss, would be a noncontinuing expense while in the case of a partial shutdown it would, without abatement, be a continuing expense and recoverable under the policy. Thus, since many losses are less than total, the insurance required is usually not out of line with the idemnity afforded.

Since use-and-occupancy insurance is intended to cover only the loss of earnings, the form quite properly disclaims liability for physical loss to stock of any kind—raw, in process, or finished. But it does cover, subject to other conditions, loss of earnings to which the destruction of stock may contribute, viz., in manufacturing risks: raw stock for a period of time for which such stock would have made operations possible and stock in process for any additional time (not exceeding thirty days) after building and equipment have been restored, necessary to remanufacture such stock to the condition in which it stood at the time of loss. This thirty-day limit may be extended for an additional premium. In the case of mercantile risks, similar thirty-day additional coverage applies to stock in trade which, after restoration of building and equipment, must be replaced on shelves and counters before business can be resumed.

The use-and-occupancy form also contains a number of conditions and warranties, chief among which are the following:

(1) The company agrees to pay emergency expenses incurred for the purpose of reducing any loss to an amount, however, not exceeding that by which the loss is reduced.

(2) In certain territories the company agrees to accept liability for not exceeding one week while access to the premises described is prohibited by order of any civil authority as the direct result of a fire in the vicinity.

(3) The insured agrees to resume full or partial operation as soon as practicable and to make use of other property if obtainable, or surplus machinery, or duplicate parts or equipment, supplies, or stock which the insured may own, all for the purpose of reducing the loss and facilitating or resuming of business.

(4) The company disclaims liability for any remote or consequential loss such as that which might result from operation of the building law, the lapse or cancellation of a lease or license, or the loss of future business.

To go back to our work sheet, let us assume that an insured has been carrying $104,000 insurance for a number of years, but that after a small loss the adjuster finds the use-and-occupancy value to be $168,803.75. With such a value the assured, under the conditions of the 80 per cent coinsurance clause, should have carried not less than $135,043. His statement of loss might perhaps show the following figures, which illustrate the importance of maintaining adequate insurance to value at all times:

LOSS STATEMENT—MANUFACTURING—80% COINSURANCE FORM

Fire, January 10, 1940

U. & O. value and loss based on books and records, verified and corrected by adjuster—		
Sales 1/1/39 to 1/1/40		$928,386.57
Less commissions on sales		3,794.66
		$924,591.91
COST OF SALES		
Inventory 1/1/39	$ 80,460.15	
Purchases 1/1/39 to 1/1/40	659,780.94	
Mfg. power and light	4,030.10	
Water	312.38	
Fuel	1,514.83	
Gas	2,684.63	
Manufacturing labor general	83,891.42	

Manufacturing labor foremen	$ 5,221.44		
	$837,895.89		
Less inventory 1/1/40	76,886.29	$761,009.60	
Gross profit		$163,582.31	

EXPENSE			U. & O. Continuing charges
Officers salaries	$ 15,400.00		$ 15,400.00
Drafting dept. salaries	27,193.51		27,193.51
Office salaries	9,800.00		9,800.00
Salesmen salaries	17,034.06		17,034.06
Ground rent	1,566.34		1,566.34
Advertising	2,872.16		2,872.16
Insurance	5,755.68		4,764.22
Taxes	1,619.49		1,619.49
Interest	5,418.64		5,418.64
Postage and stationery	1,998.58		
Dues and donations	369.51		
Traveling expense	6,220.77		
General expense misc.	4,669.00		1,000.00
Repairs building	1,396.72		1,396.72
Bad accounts	8,265.85		
Drafting dept. expense	1,956.61		
Machinery repairs	4,102.55		4,102.55
Auto truck maintenance	546.90		546.90
Auto truck operation	2,468.66		2,468.66
Depreciation building	2,414.68		2,414.68
Depreciation machinery	4,872.57		4,872.57
		125,942.28	
Net profit		$ 37,640.03	37,640.03
Foremen			5,221.44
			$145,331.97

PRODUCTION BY MONTHS, YEAR 1939	
January	$ 95,826.30
February	92,174.75
March	80,260.22
April	71,432.67
May	69,480.80
June	64,352.44
July	52,780.40
August	57,371.86
September	69,672.74
October	87,640.20
November	94,586.55
December	89,012.98
	$924,591.91

ITEM NO. 1 OF FORM	
U. & O. Value—gross profit	$163,582.31
Add salaries foremen	5,221.44
	$168,803.75
Insurance required under item No. 1 80% of $168,803.75 =	$135,043.00

LOSS STATEMENT—MANUFACTURING—80% COINSURANCE FORM
Fire, January 10, 1940
(Continued)

ITEM NO. 2 ORDINARY PAYROLL—UNINSURED

Insurance under item No. 1	$104,000.00
Loss as agreed—one week, January 10 to 16, inc.	
Anticipated production for January	95,826.30
Actual production for January	84,666.22
Loss of Production	$ 11,160.08

U. & O. loss 11,160.08/924,591.91 of $145,331.97 = $1,754.20
Under application of the 80% contribution clause, company's liability is 104,000/135,043 of $1,754.20 = $1,350.95

	VALUE	LOSS	INSURANCE	CLAIM
Item No. 1	$168,803.75	$1,754.20	$104,000.00	$1,350.95

Cost: Considering the indemnity afforded, the price of use-and-occupancy insurance is reasonable. As the local rules vary in different parts of the country, costs vary also but, in general, the rate will be found to run from 70 per cent to 80 per cent of the 80 per cent coinsurance building rate. Thus, if the mythical factory to which we have just referred were located in New York and if its fire-insurance-building rate were $.50, the annual cost of $135,000 fire use-and-occupancy insurance would be $519.75 (50%×70%+10%×$135,000) an amount which, in the event of a total loss, would be recoverable *in less than two days*. If written on a three-year basis, the annual cost would be reduced to $433.12.

BUSINESS-INTERRUPTION INSURANCE UNDER THE GROSS-EARNINGS FORM

About three years ago, in response to popular demand, the companies brought out the gross-earnings form. This form, designed for use only in connection with mercantile risks, is much simpler than the coinsurance form in that the amount of insurance to be carried is based solely and directly upon one figure—the gross earnings of the business. The figure itself is defined as the total net sales less the cost of merchandise sold, plus, of course, any other earnings of the business such as rents, royalties, etc. As no deductions are allowable, the ordinary payroll is included in the "gross" margin as are all items of overhead expense and profit.

In the event of loss the company agrees to pay (subject to all other conditions of the contract) an amount equal to the *reduction* in the gross earnings less noncontinuing expenses for the time required with due diligence to replace or repair the property covered by the policy. Indemnity is also provided for any period of time not exceeding two weeks while, as a result of fire (or other insured casualty) in the vicinity, access to the premises is prohibited by civil authorities. With respect to continuing charges, including payroll, the company agrees to give due consideration to their payment to the extent necessary to resume operations with the same quality of service which existed before the casualty. So, while common labor might be discharged, the salaries of important and experienced help—those vital to the successful continuation of the business—would be considered as a necessary charge.

This form is similar to the 80 per cent coinsurance form in that it carries the usual clauses relating to resumption of operations, expenses to reduce loss, and special exclusion of consequential and remote losses, but it differs with respect to coinsurance. The amount of insurance required under the coinsurance clause may be, at the insured's option, 50 per cent, 60 per cent, 70 per cent, or 80 per cent of the gross margin, and the rates vary according to the following table:

Coinsurance	Rate
80%	60% of the 80% coinsurance building rate
70%	65% of the 80% coinsurance building rate
60%	70% of the 80% coinsurance building rate
50%	80% of the 80% coinsurance building rate

Factors to be considered in arriving at a decision as to percentage of coinsurance to be used are (1) estimated time required to rebuild after a serious loss and (2) the percentage of the whole annual gross earning which would be affected if such a loss should occur during the busiest season of the year. Though only three months might be required to rebuild if 60 per cent of a firm's annual earnings fall within any three months' period, then that firm could not afford to carry less than 60 per cent insurance to value if full protection is desired.

Owing to its simplicity and the ease with which the amount of insurance may be determined, this form is rapidly increasing in popularity.

Extra-Expense Insurance

Extra-expense insurance, a relatively new form of protection, was designed in response to a demand on the part of certain types of manufacturing and service risks whose operations are of such a nature as to require their immediate resumption in the event of a casualty.

Publishers, magazine distributors, dairies, ice cream manufacturers, banks, and laundries are just a few of the large group of industries which in the event of a casualty must, if they are to live, find ways and means of continuing their operations through the use of other facilities. Newspaper officials know that yesterday's edition isn't worth a plugged nickel today. They know too that the failure of publication for a single day might mean the loss of thousands of dollars worth of public support and goodwill. Consequently, newspapers frequently have contracts with other firms in their own line under which they mutually agree to furnish each other with services and the use of plant equipment when necessary. Or even without any agreement a firm may, after a casualty, set up such temporary quarters as would enable it to continue its regular volume of business. In either case extra expenses are incurred—expenses which may be insured under this form of policy.

As in the case of use-and-occupancy and gross-earnings insurance, the company's liability is limited to the time required to rebuild—defined in the form as the "period of restoration." This period of restoration is in reality the period during which indemnity is provided. It may vary according to the needs of the assured but shall not be less than three months, and *no more than* (less if desired) 40 per cent of the amount of the policy shall be allocated to any one month. For example, if a plant could be rebuilt in as short a time as ninety days, the insured can carry extra-expense insurance for that time and would recover the full amount of the policy, provided the actual loss sustained reached that amount.

Since there is no coinsurance or partial suspension clause in the contract, it is not permissible to blanket extra expense over several plants at different locations, but coverage must apply to a single plant or the various units thereof at a single location.

Extra-expense insurance covers the excess of the total cost during the period of restoration of the operation of the business, either at the insured location or on other premises, or both, over and above the total cost of such operation that would normally have been incurred during the same period had no fire occurred. For example, assume that the total income of a newspaper for thirty days is $50,000. This $50,000 includes $5,000 net profit, $35,000 ordinary operating costs (noncontinuing), such as labor, heat, light, power, materials, supplies and stock, and $10,000 representing such fixed charges and expenses as must necessarily continue during an interruption of business.

In the event of fire or other casualty, arrangements are made to print the paper in an outside plant. The actual cost of "farming out" the paper for thirty days at the outside plant is $50,000.

The amount of extra-expense insurance would be arrived at as follows:

Such fixed charges as must necessarily continue during an interruption of business	$10,000
Actual cost of publication at outside plant.	50,000
	$60,000
Less normal cost of publication.	45,000
Amount of extra expense incurred (30 days).	$15,000

If this plant could be entirely rebuilt in 120 days or four months, $60,000 would be the proper amount of extra-expense insurance.

Though this form does not cover any loss of profits or earnings, it is obvious that unless a concern suffers on actual loss of volume of business there can be no loss of profit. On the other hand, there are instances where a business might reasonably anticipate some diminution of income, even though every effort might be made to continue operations in as nearly a normal manner as possible. Under such circumstances, use-and-occupancy insurance should be carried to protect the loss of earnings. While the use-and-occupancy contract embraces an extra-expense provision, indemnity under this specific provision is limited to "not exceeding the amount by which the loss under this policy is hereby reduced." Therefore, if the cost of continuing operations at an outside location or by reason of erecting temporary quarters on the insured premises should involve extra expense in excess of the amount collectible under a use-and-occupancy policy, specific extra-expense insurance should be carried in an amount equal to such excess additional expenses.

For example, take the case of a newspaper with a daily and Sunday edition where the Sunday circulation more than doubles that of the daily. Upon investigation, the publisher finds that outside facilities for printing the daily paper are available, but that no outside plant within a reasonable distance can print the Sunday paper. Under the circumstances, no Sunday paper will be published in the event of destruction or damage to the plant.

In such a case, use-and-occupancy insurance will indemnify the owner for the loss of earnings, as defined in that contract, resulting from the nonpublication of the Sunday paper, and will also indemnify him for the extra expense incurred in the publication of the daily paper, up to an amount representing his use-and-occupancy loss in connection with the insured property. The excess extra expense, over and above the amount collectible under the use-and-occupancy policy, may be covered under an extra-expense contract.

With respect to cost of replacing or repairing any insured property destroyed, the policy covers only the excess over and above the normal cost of repairs, the liability for such excess, however, to be not more than the amount by which the extra expense otherwise payable is reduced.

The cost of this coverage, varying according to "the period of restoration," is obtainable with the proper forms upon application to any insurance agent or broker. But I might say that, in general, the premium of a policy covering a period of restoration of, say, three or four months, is figured on a rate equal to approximately twice the 80 per cent coinsurance building rate of the risk.

Most large industrial and manufacturing concerns doing a national business are believers in and are thoroughly acquainted with the various forms of earnings insurance. Their operations are on such a large scale as to enable them to employ experts whose duty it is to keep in daily touch with the pulse of the insurance world. But thousands of smaller merchants and manufacturers are less fortunately situated and many of these depend largely upon the advice of those who are in closest touch with the fiscal side of the business. Thus, as the certified public accountant increases his own knowledge of insurance, he increases his value to his client.