Students' Department

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Consolidated Goodwill in Relation to Minority Interest

Several times recently this department has been asked questions which involve a point in the preparation of consolidated balance-sheets which may be put as follows:

If a holding company pays more than book value for a controlling interest in a subsidiary, an element of goodwill is introduced into the consolidated balance-sheet; this goodwill is a part of the net assets offsetting the holding company's net worth, or the equity of the controlling interest; should not a pro rata amount of goodwill be added to the minority interest?

The point at issue can be made clearer by an illustration. Company A has the following balance-sheet at December 31, 1926.

COMPANY "A"

Balance-sheet, December 31, 1926

Assets	$200,000	Liabilities	$75,000
		Capital stock	100,000
		Surplus	25,000
	$200,000		$200,000

This company, on December 31, 1926, purchases for $72,000 ninety per cent. of the stock of company B, whereupon its balance-sheet becomes:

COMPANY "A"

Balance-sheet, December 31, 1926

Investment in Company B	$72,000	Liabilities	$75,000
Other assets	128,000	Capital	100,000
		Surplus	25,000
	$200,000		$200,000

The subsidiary's balance-sheet, at the date of acquisition of 90 per cent. of its stock by company A, follows:

COMPANY "B"

Balance-sheet, December 31, 1926

Assets	$85,000	Liabilities	$15,000
		Capital stock	50,000
		Surplus	20,000
	$85,000		$85,000

The consolidated working papers and balance-sheet, prepared in accordance with the procedure usually regarded as correct, are as follows:

CONSOLIDATED WORKING PAPERS

Assets	Company A	Company B	Inter-Co. elimina-tions	Consolidated balance-sheet
Investment in Company B	$72,000			
Eliminate book value at acquisition:				
Capital stock.........			$45,000	
Surplus 90% of $20,000.			18,000	
Goodwill.............				$9,000
Other assets............	128,000	$85,000		213,000
	$200,000	$85,000	$63,000	$222,000
Liabilities				
Liabilities..............	$75,000	$15,000		$90,000
Capital stock:				
Company A..........	100,000			100,000
Company B..........		50,000	$45,000	5,000
Surplus:				
Company A..........	25,000			25,000
Company B..........		20,000	18,000	2,000
	$200,000	$85,000	$63,000	$222,000

COMPANY "A" AND SUBSIDIARY

Consolidated balance-sheet, December 31, 1926

Assets		*Liabilities*	
Goodwill...............	$9,000	Liabilities..............	$90,000
Other assets............	213,000	Minority interest.......	7,000
		Capital stock...........	100,000
		Surplus................	25,000
	$222,000		$222,000

But, we are asked, if the ninety per cent. of company B stock owned by company A has a goodwill of $9,000, does not the ten per cent. of this stock owned by outside stockholders have a corresponding goodwill of $1,000; and if so, should not the total goodwill of $10,000 be set up in the consolidated balance-sheet, with an addition of $1,000 to the minority interest? This treatment would result in the following consolidated balance-sheet:

COMPANY "A" AND SUBSIDIARY

Consolidated balance-sheet, December 31, 1926

Assets		*Liabilities*	
Goodwill...............	$10,000	Liabilities..............	$90,000
Other assets............	213,000	Minority interest.......	8,000
		Capital stock...........	100,000
		Surplus................	25,000
	$223,000		$223,000

While this balance-sheet appears to be based upon a logical premise, this department doubts whether the logic will bear analysis.

In the first place, we do not think that, merely because ninety per cent. of the stock has a goodwill value of $9,000, it necessarily follows that the remaining ten per cent. of the stock has a goodwill value of $1,000. The goodwill of $9,000 attaches to the stock because it was purchased at a price of $9,000 in excess of the book value of the proportionate interest in the net assets which it represents. It does not follow that the remaining stock would or could be purchased at the same price. Instances could be cited to illustrate the squeeze which a small minority interest is able to apply to a controlling interest which finds it necessary or expedient to acquire all the stock of a subsidiary. On the other hand, the holding company may regard it as advisable, for the purposes of finance or the maintenance of a favorable public opinion, to allow a considerable proportion of the subsidiary stock to remain in the possession of a minority interest.

Moreover, acquisition of a mere control in some essential unit may be so imperatively desirable that an excessive price for a controlling interest may be justified; but such a price would not be justified in the acquisition of any stock in excess of that which is essential to maintain control. The further fact should not be overlooked that after control of a highly profitable company has been obtained by the payment of a high price for its stock, manipulation is possible whereby the profits are made to arise in some other unit of the consolidation, with a consequent decline in the market value of the outstanding, minority-held subsidiary stock.

It seems fairly obvious, therefore, that one share of minority-owned stock does not necessarily carry one-ninth as much goodwill as nine shares of holding-company-owned stock. But even if it did, it does not appear to this department to be good accounting to give any recognition in the consolidated balance-sheet to such goodwill as is applicable to the minority holdings. Certain principles governing the goodwill account are generally recognized in theory, although they are probably as generally violated in the abuse of the goodwill account. One of these principles is that goodwill should not appear in the balance-sheet unless it has been paid for. In logical correlation with this principle are the following: the amount appearing in a balance-sheet as goodwill should be the amount paid for it, which may be more or less than the real value of the goodwill at the date of the balance-sheet; and goodwill should not be established in the accounts or balance-sheet by an offsetting increment to the surplus.

If we apply these principles to test the propriety of including in the consolidated balance-sheet the goodwill applicable to the controlled stock, we find that none of them is violated. The $9,000 goodwill appearing in the first consolidated balance-sheet was purchased, as the holding company by the payment of $72,000 acquired an equity of $63,000, or ninety per cent. of $70,000, in the net assets on the books of company B, and the excess of $9,000 is recognized as a payment for an intangible generally recognized as suitably termed goodwill. Moreover, company A's surplus, as appearing in its own balance-sheet and in the consolidated balance-sheet, was not affected by the appearance of this goodwill, as the charge to goodwill was offset by a credit to cash or other assets.

However, if the goodwill is increased from $9,000 to $10,000, and the minority interest from $7,000 to $8,000, all of the above stated principles are violated. The additional $1,000 of goodwill has not been purchased; hence the $1,000 can not be its purchase price, but is merely an estimate, probably inaccurate, of its value; and finally its appearance in the consolidated balance-sheet involves an unrealized inflation of surplus, as evidenced by the following analysis of the resulting $8,000 minority interest:

Minority interest in company B:		
Capital stock		$5,000
Surplus:		
Earned	$2,000	
Created by offsetting addition to goodwill	1,000	3,000
Total		$8,000

A good rule should work both ways; but, even if a holding company in preparing its consolidated balance-sheet might be willing to make the gracious gesture of showing the minority interest in the subsidiary at an amount exceeding the value reflected by the books of the subsidiary in which the minority holds its interest and perhaps also in excess of the amount which the holding company might desire or be obliged to pay for the stock, it is doubtful whether the holding company would care to make the ungracious gesture of showing the minority interest at an amount less than the book value thereof.

If we assume that the holding company, in the preceding illustration, had purchased the stock for $54,000 instead of $72,000, there would be a negative goodwill of $9,000. If the minority holdings of stock are regarded as subject to a similar negative value, the minority interest will be shown in the consolidated balance-sheet at $6,000, although the subsidiary's books show that the minority stock has a value of $7,000. Reducing the minority interest by $1,000 would logically involve a corresponding addition to the holding company's surplus or deduction from consolidated goodwill, neither of which appears to be justified.

Sinking-fund Payments

This department has been asked by M. E. Levy, Detroit, Michigan, to prepare a solution for the following:

"On January 1, 1927, a corporation floats a 5 per cent. bond issue for $100,000. The agreement states that a sinking fund is to be established to which equal annual payments are to be made for 15 years starting December 31, 1927. The sinking fund must be sufficient to meet principal and interest payments. The bonds are to be retired, $10,000 per annum plus interest to date, starting December 31, 1932."

No sinking-fund interest rate was given by Mr. Levy, and in the following solution we have assumed a rate of 4 per cent.

COMPUTATION OF AMOUNT WHICH WOULD BE IN THE FUND

At December 31, 1941, if no withdrawals were made

	Principal unpaid	Payments from fund			Amount of 1 at Dec. 31, 1941, at 4%	Product
		Principal	Interest	Total		
Dec. 31, 1927	$100,000.00		$5,000.00	$5,000.00	1.7316764	$8,658.38
Dec. 31, 1928	100,000.00		5,000.00	5,000.00	1.6650735	8,325.37
Dec. 31, 1929	100,000.00		5,000.00	5,000.00	1.6010322	8,005.16
Dec. 31, 1930	100,000.00		5,000.00	5,000.00	1.5394541	7,697.27
Dec. 31, 1931	100,000.00		5,000.00	5,000.00	1.4802443	7,401.22
Dec. 31, 1932	100,000.00	$10,000.00	5,000.00	15,000.00	1.4233118	21,349.68
Dec. 31, 1933	90,000.00	10,000.00	4,500.00	14,500.00	1.3685690	19,844.25
Dec. 31, 1934	80,000.00	10,000.00	4,000.00	14,000.00	1.3159318	18,423.05
Dec. 31, 1935	70,000.00	10,000.00	3,500.00	13,500.00	1.2653190	17,081.81
Dec. 31, 1936	60,000.00	10,000.00	3,000.00	13,000.00	1.2166529	15,816.49
Dec. 31, 1937	50,000.00	10,000.00	2,500.00	12,500.00	1.1698586	14,623.23
Dec. 31, 1938	40,000.00	10,000.00	2,000.00	12,000.00	1.1248640	13,498.37
Dec. 31, 1939	30,000.00	10,000.00	1,500.00	11,500.00	1.0816000	12,438.40
Dec. 31, 1940	20,000.00	10,000.00	1,000.00	11,000.00	1.0400000	11,440.00
Dec. 31, 1941	10,000.00	10,000.00	500.00	10,500.00	1.0000000	10,500.00
						$195,102.68

COMPUTATION OF SINKING-FUND CONTRIBUTION

Amount of annuity of 1 for 15 periods at 4% = 20.0235876

$195,102.68 ÷ 20.0235876 = $9,743.64

PROOF

Date	Additions to fund: Contribution	Additions to fund: Interest	Withdrawals from fund: Bonds paid	Withdrawals from fund: Interest	Balance in fund
Dec. 31, 1927	$9,743.64			$5,000.00	$4,743.64
Dec. 31, 1928	9,743.64	$189.75		5,000.00	9,677.03
Dec. 31, 1929	9,743.64	387.08		5,000.00	14,807.75
Dec. 31, 1930	9,743.64	592.31		5,000.00	20,143.70
Dec. 31, 1931	9,743.64	805.75		5,000.00	25,693.09
Dec. 31, 1932	9,743.64	1,027.72	$10,000.00	5,000.00	21,464.45
Dec. 31, 1933	9,743.64	858.58	10,000.00	4,500.00	17,566.67
Dec. 31, 1934	9,743.64	702.67	10,000.00	4,000.00	14,012.98
Dec. 31, 1935	9,743.64	560.52	10,000.00	3,500.00	10,817.14
Dec. 31, 1936	9,743.64	432.69	10,000.00	3,000.00	7,993.47
Dec. 31, 1937	9,743.64	319.74	10,000.00	2,500.00	5,556.85
Dec. 31, 1938	9,743.64	222.27	10,000.00	2,000.00	3,522.76
Dec. 31, 1939	9,743.64	140.91	10,000.00	1,500.00	1,907.31
Dec. 31, 1940	9,743.64	76.29	10,000.00	1,000.00	727.24
Dec. 31, 1941	9,743.64	29.09	10,000.00	500.00	.03*
	$146,154.60	$6,345.37	$100,000.00	$52,500.00	

Distribution of Earnings

The following solution to problem No. 4, part II, of the examination in accounting theory and practice given by the American Institute of Accountants, November 19, 1926, was submitted by D. F. Peery and is published as a matter of interest:

"The problem states that a statement setting forth the amounts paid to the board of directors and to the two separate classes of stockholders should be prepared. It also states that the accountant obtains the amount of net profits after depreciation and reserves, but before provision for directors' salaries, commissions and bonus. This leads to the conclusion that the investigation was limited to the inspection of the minutes and to the ascertaining of the profit and loss as shown by operating statements prepared by the company, inasmuch as if the books had been available he could have determined the distribution without question. Further proof that the operating ledgers were not available is that the income and excess-profits taxes of the company should have been computed and paid before the investigation was started, and the tax having been computed, the amounts of commission and bonus must have been computed and known, as they are both deductible for the purpose of income tax, and certainly the amounts shown in the problem are not the amounts carried forward in the profit-and-loss account.

"Therefore, inasmuch as the investigation was limited, and despite the fact that the problem provides that the amounts *paid* shall be computed, the accountant is unable to certify to the amounts so paid. His efforts are limited to the extent of ascertaining what, according to his interpretation of the minutes, should have been paid, and his report should be so qualified.

"In this solution the profit-and-loss figures are stated to be after reserves and depreciation, and inasmuch as the accountant's examination was limited, it must be assumed that the accounting procedure, up to the point of computing the profit-and-loss figures shown, was correct.

"The situation may be summed up as follows:

Profit as shown is before deduction for salaries.................	$250,000
Salaries must be deducted before commission can be computed...	60,000
Difference is available for commissions....................	$190,000
Commissions must be computed and deducted from the above result..	7,000
This difference is available for income, excess-profits tax and bonus...	$183,000

"Inasmuch as no amount available for distribution of dividends may be arrived at until all charges including federal taxes have been provided for, the $183,000 is split up between bonus, excess-profits tax, income tax and amount available for dividends. Bonus is an allowable deduction for both income and excess-profits tax and excess-profits tax is an allowable deduction for income tax. This makes necessary a rather extended computation, the results of which are shown on an accompanying exhibit.

"The above procedure is similar for all years, except that the year 1921 is the only one in which excess-profits taxes were assessed.

"In order to figure excess-profits taxes one must know the invested capital. It has been assumed that the company had a surplus of $225,000, which together with the capital stock of $1,200,000 makes an invested capital of $1,425,000.

"Due to the fact that the problem invites no opinions, no comments concerning the accountant's opinions are made with reference to whether the amounts allowed directors was excessive or whether it was necessary or desirable for the company to declare further dividends on common stock. It is deemed sufficient, as near as possible, to place facts before the client and allow him to draw his own conclusions.

"In view of the fact that undoubtedly the report will be used as a basis of a discussion between the trustee and the directors, it is important that the accountant refrain from placing himself in the position of taking sides with either party.

"Mr. B, Trustee,
"Estate of A, Deceased,
"Dear Sir:

"In accordance with your instructions, we have made an investigation of the affairs of company 'X' for the purpose of ascertaining the distribution of the earnings made by that company for the years 1921 to 1925, both inclusive.

"The net profit for the five-year period as shown by the books, without our verification by audit, and the distribution thereof according to our interpretation of the minutes of the stockholders' meetings is shown in the following summary:

Profit			$1,226,000.00
Salaries	$300,000.00		
Commissions	34,700.00		
Bonus	38,895.32	$373,595.32	
Income tax	$101,743.00		
Excess-profits tax	11,650.10	113,393.10	
Dividends on preferred stock		300,000.00	
Dividends on common stock		100,000.00	886,988.42
Capital retained in business			$339,011.58

"Further details of the distribution may be found in the following described exhibits:

Exhibit "A"—Analysis of distribution of profit by years
" "C"—Summary of amounts paid directors by years
" "B"—Computation of taxes and bonus by years

"Respectfully submitted,

Exhibit "A"

COMPANY "X"

Analysis of distribution of net profits by years

	1921	1922	1923	1924	1925	Total
Profit and loss before provision for salaries, commissions, bonus and federal taxes	$250,000.00	$215,000.00	$245,000.00	$296,000.00	$220,000.00	$1,226,000.00
Deduct: salaries 4 at $15,000.00	60,000.00	60,000.00	60,000.00	60,000.00	60,000.00	300,000.00
Profit and loss before provision for commissions, bonus and federal taxes	$190,000.00	$155,000.00	$185,000.00	$236,000.00	$160,000.00	$926,000.00
Deduct: commissions—						
At 2½%	$2,500.00	$2,500.00	$2,500.00	$2,500.00	$2,500.00	$12,500.00
At 5 %	4,500.00	2,750.00	4,250.00	5,000.00	3,000.00	19,500.00
At 7½%				2,700.00		2,700.00
Total commissions	$7,000.00	$5,250.00	$6,750.00	$10,200.00	$5,500.00	$34,700.00
Profit and loss before provision for bonus and federal taxes	$183,000.00	$149,750.00	$178,250.00	$225,800.00	$154,500.00	$891,300.00
Deduct:						
Bonus	$7,749.48	$6,592.76	$7,847.48	$9,940.88	$6,764.72	$38,895.32
Excess-profits tax	11,650.10					11,650.10
Income tax	16,360.05	17,894.66	21,300.31	26,982.39	19,205.59	101,743.00
Total	$35,759.63	$24,487.42	$29,147.79	$36,923.27	$25,970.31	$152,288.42
Profit available for dividends	$147,240.37	$125,262.58	$149,102.21	$188,876.73	$128,529.69	$739,011.58
Dividends paid:						
On preferred stock—6%	$60,000.00	$60,000.00	$60,000.00	$60,000.00	$60,000.00	$300,000.00
On common stock—10%	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	100,000.00
Total dividends	$80,000.00	$80,000.00	$80,000.00	$80,000.00	$80,000.00	$400,000.00
Profit left in business	$67,240.37	$45,262.58	$69,102.21	$108,876.73	$48,529.69	$339,011.58

COMPANY "X"

Exhibit "B"

Summary of amounts paid directors

	1921	1922	1923	1924	1925	Total
Salaries.........	$60,000.00	$60,000.00	$60,000.00	$60,000.00	$60,000.00	$300,000.00
Commissions....	7,000.00	5,250.00	6,750.00	10,200.00	5,500.00	34,700.00
Bonus..........	7,749.48	6,592.76	7,847.48	9,940.88	6,764.72	38,895.32
Total.........	$74,749.48	$71,842.76	$74,597.48	$80,140.88	$72,264.72	$373,595.32

COMPANY "X"

Exhibit "C"

Computation of bonus and taxes, year 1921

NOTE:—This being the year in which excess-profits taxes were assessed, the following computation has been made:

Preferred stock................................	$1,000,000.00		
Common stock................................	200,000.00		
Surplus—January 1, 1921 (assumed)..............	225,000.00		
Invested capital.............................		$1,425,000.00	
Allowance—8%...............................		8%	
		$114,000.00	
Exemption..................................		3,000.00	
Total exempt from excess-profits tax............		$117,000.00	
Bonus:			
Profit and loss before bonus and taxes..........		$183,000.00	$183,000.00
Deduct:			
Excess-profits tax........................	$11,650.10		
Income tax.............................	16,360.05	28,010.15	
		$154,989.85	
		@ 5%	$7,749.48
Excess-profits tax:			
Profit and loss before bonus and taxes..........		$183,000.00	
Deduct: bonus..............................		7,749.48	
		$175,250.52	
Deduct: exemption..........................		117,000.00	
		$58,250.52	
		@ 20%	11,650.10
Income tax:			
Profit and loss before bonus and taxes..........		$183,000.00	
Deduct:			
Bonus................................	$7,749.48		
Excess-profits tax........................	11,650.10	19,399.58	
Carried forward.......................		$163,600.42	

Brought forward	$163,600.42 @ 10%	$ 16,360.05
Total		$35,759.63
Profit and loss after bonus and taxes		$147,240.37

	1922	1923	1924	1925
Bonus:				
Profit and loss before bonus and taxes	$149,750.00	$178,250.00	$225,800.00	$154,500.00
Deduct: tax (below)	17,894.66	21,300.31	26,982.39	19,205.59
	$131,855.34	$156,949.69	$198,817.61	$135,294.41
Bonus @ 5%	$6,592.76	$7,847.48	$9,940.88	$6,764.72
Income tax:				
Profit and loss before bonus and taxes	$149,750.00	$178,250.00	$225,800.00	$154,500.00
Deduct: bonus (above)	6,592.76	7,847.48	9,940.88	6,764.72
	$143,157.24	$170,402.52	$215,859.12	$147,735.28
Income tax @ 12½% (1925 @ 13%) (above)	$17,894.66	$21,300.31	$26,982.39	$19,205.59