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A FLOW CHART APPROACH TO CONSOLIDATIONS

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E.C.R.S.B. 81-3

A FLOW CHART APPROACH TO CONSOLIDATIONS

ABSTRACT

Although the consolidation process is a series of interrelated adjustments and eliminations, it is rarely pictured as an integrated whole. The flow chart approach presented herein accomplishes this objective and can serve as a model for the solution of consolidation problems. Following this conceptual approach allows the user to see the place of each adjustment and elimination in the overall perspective of the consolidation process.

A FLOW CHART APPROACH TO CONSOLIDATIONS

The teaching of consolidations often follows a segmented approach in which selected topics and the related eliminations are examined somewhat independently of each other and of the effect on the overall consolidation. In the flow chart approach presented in this paper, the emphasis is on the complete sequential development of the consolidation process through a series of interrelated steps and eliminations. The flow chart, augmented by the development of the elimination entries identified in the flow diagram, is presented in Figure 1.

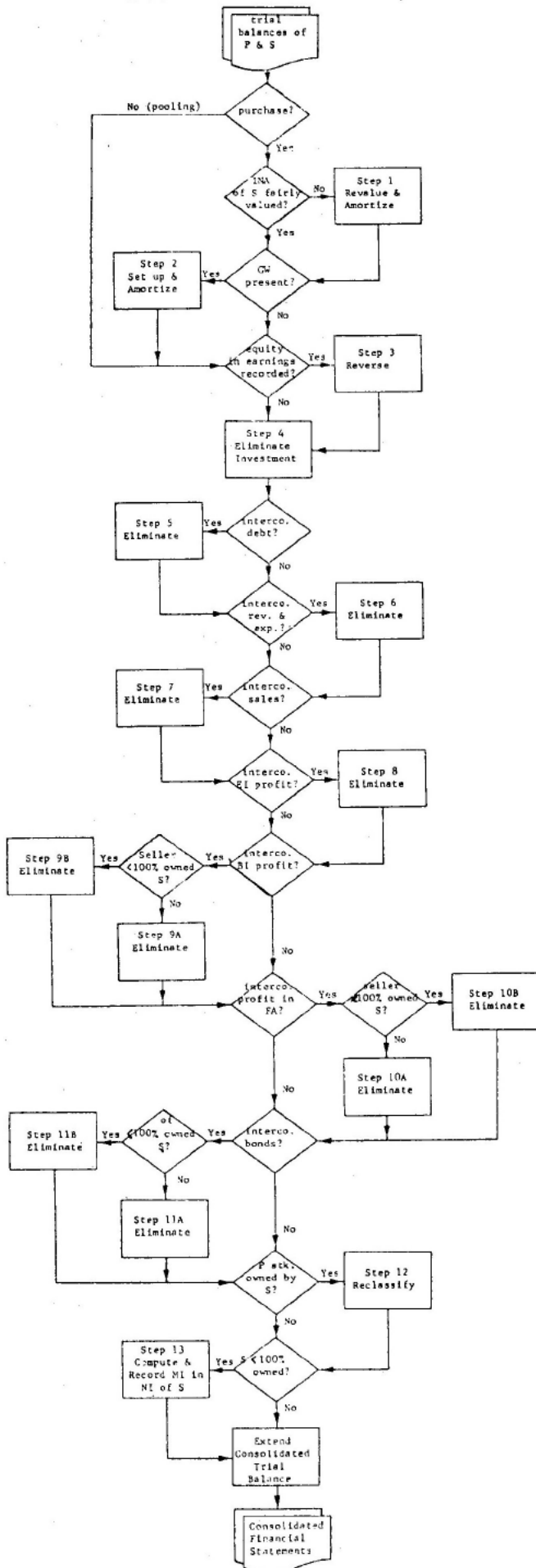
In conformity with Modern Advanced Accounting Meigs, Mosich and Larsen, 1975 Figure 1 utilizes entity theory for the calculation of goodwill, parent theory for the computation of minority interest, and the treasury stock method for dealing with parent company stock owned by a subsidiary. Income taxes are omitted from consideration and proper use of the equity method by the parent in accounting for the investment in the subsidiary is assumed. However, it is further assumed that the parent recorded its share of the subsidiary's net income as reported without adjustment for items of intercompany profit or loss included in the net income of the subsidiary. Abbreviations used are as follows:

INA = identifiable net assets	FA = fixed assets
S = subsidiary company	MI = minority interest
P = parent company	APIC = additional paid in capital
GW = goodwill	BRE = beginning retained earnings
EI = ending inventory	FV = fair value
BI = beginning inventory	BV = book value

Although the flow chart does not cover every conceivable problem and situation which can arise in a consolidation, it will accommodate most consolidations. In fact, the three types of consolidation problems which have appeared in the practice part of the CPA examination in recent years can be solved by following the procedures outlined. The only necessary adaptation is to substitute "net income" for specific

revenue and expense accounts in the eliminations if a retained earnings statement and a balance sheet are furnished instead of a pre-closing trial balance. If the problem involves only a balance sheet, "retained earnings" would be used in the eliminations in place of the nominal accounts. Figure 2 shows the use of the step-by-step procedures in solving these three types of consolidation problems. The CPA examination problems are identified but not reproduced and only the eliminations required by each problem are shown.

FIGURE 1
Consolidation Flow Chart and Elimination Steps



1. Adjust INA of S to FV as of date of P's purchase of S, and correct amortization, both past (from date of purchase to beginning of current year) and current (this year's)

If INA undervalued:

INA
APIC of S
Expense (current)
BRE (past)
INA

If INA overvalued:

APIC of S
INA
Expense (current)
BRE (past)

2. Compute and record GW as of date of purchase, and reflect associated amortization, both past and current

$$GW = (\text{Cost of Investment} - (\text{P's \% ownership} \times \text{FV of INA of S at date of purchase, less any preferred stock equity therein})) \div \text{P's \%}$$

If positive GW:

GW
APIC of S
Expense (current)
BRE (past)
GW

If negative GW:

APIC of S
Fixed Assets (or other appropriate account)
Fixed Assets
Expense (current)
BRE (past)

3. Eliminate equity in earnings of S against investment in common stock of S

Equity in Earnings of S
Investment in Common Stock of S

4. Eliminate P's investment account(s) against contributed capital accounts of S, BRE of S and current dividends of S, if any. (Note: If P's % ownership changed during the year, retained earnings of S at date of change should be used rather than BRE. MI in stockholders' equity of S, if any, is isolated in this process, with the exception of MI in current net income of S which is recorded in Step 13)

Preferred Stock of S (if any)
Common Stock of S
APIC of S
BRE of S
Dividends of S
Investment in Preferred Stock of S (if any)
Investment in Common Stock of S
MI

5. Eliminate intercompany indebtedness

Payables
Receivables

6. Eliminate intercompany service revenue and expense

Service Revenue
Service Expense

7. Eliminate intercompany sales

Sales
Cost of Sales

8. Eliminate intercompany EI profit

Cost of Sales
EI

9. Eliminate intercompany BI profit

A. If sold by P or 100% owned S:
BRE
Cost of Sales

B. If sold by less than 100% owned S:

BRE (P's % ownership x profit)
MI (MI's % ownership x profit)
Cost of Sales

10. Eliminate intercompany profit in fixed assets and excess depreciation, that is, depreciation taken on the gain element

A. If sold by P or 100% owned S:
Gain (or BRE, if sale in prior year)
Fixed Asset

B. If sold by less than 100% owned S:

Gain (or BRE (P's % x gain) and MI (MI's % x gain) if sale in prior year)
Fixed Asset

Fixed Asset (or Accum. Depr.)
Deprac. Expense (current)
BRE (past)

Fixed Asset (or Accum. Depr.)
Deprac. Expense (current)
BRE (P's % x past deprec. on gain element)
MI (MI's % x past deprec. on gain element)

Note: If intercompany sale of inventory or fixed assets made below cost, all entries in 8 to 10 above would be reversed as to debit and credit and "loss" substituted for "gain" in 10A and 10B.

11. Eliminate intercompany nonholdings

A. If bonds of P or 100% owned S:

Bonds Payable (face amount owned)
Investment in Bonds (BV)
Bond Premium (% owned x BV of premium) (or Bond Discount, if applicable)
Interest Revenue (on the bonds owned)
Interest Expense (on the bonds owned)
Loss (or BRE, if purchased in prior year) (or Gain (or BRE), if applicable)

B. If bonds of less than 100% owned S:

The entry is the same except that any balancing debit or credit (to BRE) must be split between P and MI according to their relative % ownerships.

12. Set up any shares of parent company stock owned by S as treasury stock, and eliminate any dividends on such stock

Treasury Stock
Investment in P Stock

Dividend Revenue
Dividends

13. Record MI in the net income of S (after adjusting the reported net income for eliminations made in Steps 1, 2, 8B, 9A, 10B, and 11B)

	Reported Net Income of S
Steps 1 & 2	+(-) Amortization expense correction
Step 8B	- profit in EI of P
Step 9A	+ profit in BI of P
Step 10B	- gain (if this year's transaction) + depreciation (current year)
Step 11B	+ gain (- loss) if this year's transaction - positive (+ negative) difference between interest revenue and interest expense on bonds owned
	<u>Adjusted Net Income of S (ANI)</u>

then, the entry would be

MI in Net Income of S (MI's % x ANI)
MI

Step _____ Type of Problem _____

Pre-closing Trial Balance
(May 1975 Part II No. 5)

Retained Earnings Statement
and Balance Sheet
(November 1976 Part II No. 4)

Balance Sheet
(November 1977 Part I No. 3)

1.	Land Mach. & Equip. 2,750,000 Other Assets Accum. Depr.: M & E Cost of Goods Sold APIC of S	540,000 2,750,000 90,000 750,000 128,000 2,322,000							
2.	Dep. Expense Accum. Dep.: M & E Goodwill APIC of S	236,250 236,250 1,400,000 1,400,000							
3.	Amort. Expense Goodwill	52,500 52,500							
4.	Pfd. Stock of S Common Stk. of S APIC of S Ret. Earnings of S S at 4/1/74 Investment	150,000 1,000,000 3,844,000 1,006,000 6,000,000							
5.	Accounts Pay. Accounts Rec.	56,300 56,300							
7.	Sales Cost of Goods Sold	388,000 388,000							
8.	Cost of Goods Sold Inventory	4,200 4,200							
9B.									
11.	Subord. Debent. Interest Revenue Investment Interest Expense	1,500,000 78,750 1,500,000 78,750							
13.									

Prop., Pl. & Inv.	13,100,000	
Long-term Debt	4,000,000	
Other Assets		13,200,000
APIC of S		
Other Assets	111,000	
Ret. Earnings	401,000	
Prop., Pl & Eq.		500,000
Long-term Debt		5,000
Goodwill	2,800,000	
APIC of S		2,800,000
Ret. Earnings	31,000	
Goodwill		35,000
Ret. Earnings	1,250,000	
Invest. in S		1,250,000
Common Stk. of S	1,000,000	
APIC of S	16,400,000	
Ret. Earnings of S		19,000,000
S at 6/30/74	1,600,000	
Invest. in S		
Dividends of S	100,000	
Invest. in S	735,000	
Minority Interest	245,000	
Accounts Pay.	500,000	
Accounts Rec.		500,000
Net Income	4,000	
Inventory		4,000
Ret. Earnings(7/1/75)	9,000	
Minority Interest	3,000	
Net Income		12,000
Bonds Payable	60,000	
Invest. in Bonds		58,000
Bond Discount		1,200
Net Income		800
Minority Interest in		
Net Income of S		
(7/1 to 12/31/75)	43,200	
Minority Interest		63,200

REFERENCE

██████████, Walter B., A. N. Mosich, and E. John Larsen, Modern Advanced Accounting
(McGraw-Hill, 1975), pp. 126 - 305.