

AN INVESTIGATION

into the preparation of

CONSOLIDATED STATEMENTS for HOLDING COMPANIES

by

DAVID JAMES BOGIE, B.Com., C.A.



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P R E F A C E

This treatise is intended for those who are interested in the compilation and presentation of Consolidated Statements, which disclose the trading results and the financial position of a group of companies. The aim of the writer has been to explore methods which would simplify the actual preparation of these Statements. The novel methods suggested are suitable, not only to the practising accountant or the secretary who may be required to make up Consolidated Statements for a large and complex group, but also to the student for examination purposes. In the many examples given the same designations for members of the group have been used to avoid confusion to the reader, while diagrams are freely employed to assist him in grasping the essential facts of each group under consideration.

The original intention of the writer was to deal only with the more complex groups, but it was soon realised that the conventional methods of preparing Consolidated Statements, as outlined in accountancy test books, were not adaptable and accordingly, after much trial and error, an entirely new method was evolved. It was also found that the new method, when introduced to simple groups, made the preparation of Consolidated Statements simple and straight forward. The treatise was therefore enlarged so as to deal with the subject from the beginning. Chapters I. to VI. (omitting perhaps the section in Chapter II. dealing with Preference Shares and the gearing of the share capital structure in the valuation of shares) form really a treatise in themselves, suitable for the student who may be studying the subject in order to acquire sufficient knowledge to pass a professional examination of one of the accountancy bodies. Chapters VII. and onwards (Part 2) deal with the more difficult points and the larger group, which may be encountered in practice.

It is fully realised that the method of treating certain matters is controversial. Up to date, however, it cannot be said that any definite rules have been laid down in regard to the constitution of Consolidated Balance Sheets and Consolidated Profit and Loss Accounts. As Consolidated Statements now form part of the annual accounts of a company, it has seemed to the writer and many of his colleagues that the moment is ripe for a more general agreement upon the accounting principles adopted and the methods used. This treatise is offered as a contribution towards that end.

PART I. THE BASIC PRINCIPLES

CHAPTER I. INTRODUCTION

In the commercial and industrial world, the merging of units into groups or combines has been one of the most marked developments of recent times. The popular form of amalgamation and executive control is by means of what is called a Holding (or Parent) Company, which is a Limited Company controlling one or more other companies called Subsidiary Companies. The holding company may be either a company already trading, or a non-trading company whose sole functions are to hold the shares of the subsidiaries and determine the policy of the group. Control is gained by the holding company purchasing either all the share capital or a sufficient amount of stock or number of shares in each subsidiary company to enable the nominees of the holding company to control the voting at shareholders' meetings of the subsidiary company.

If the holding Company acquires all the Share Capital of a subsidiary, the latter becomes a fully-owned subsidiary but it still retains its separate legal entity unless and until it is wound up and its assets and liabilities merged with those of the holding company. As to whether liquidation and absorption is desirable depends on various factors, namely:-

1. The size and geographical situation of the companies: A complete merger may make an unwieldy company which is difficult to manage and control.
2. The effect on third parties:- It may be preferable or indeed necessary to continue a company as a separate entity to preserve the full value of goodwill or to avoid dislocation of efficient staff and contented workers.
3. The Taxation Position:- In view of the high taxation, the effect on a merger should be considered carefully for losses carried forward or other benefits may be lost if a Company is liquidated.
4. The desirability of keeping the companies separate in order to limit Liability:- In the case where the subsidiary's trading activities are of an experimental or speculative nature, the future success of which is doubtful, the subsidiary may be kept as a separate legal entity if the holding company does not wish to make itself legally liable for the debts of the subsidiary. The ethics of such a procedure is doubtful.

5. The cost of the Liquidation and Stamp Duty on a conveyance of assets:-

This may deter complete absorption.

6. If a subsidiary has low interest bearing debentures or Preference Shares with low dividend rights, it will be wise to keep the company as a separate entity, and so retain these beneficial features.

The popularity of the holding company as a method of combine is accounted for by such factors and by the economy of capital involved in purchasing control of a company, for acquisition of anything over 50% of the voting power is all that is required.

Under the Companies Act a Private Company must have at least two members and a Public Company at least seven, so that when a company becomes a fully-owned subsidiary all the shares cannot be registered in the name of the holding company. The technical difficulty is surmounted simply by the handing over of one or two shares to a requisite number of nominees who hold the shares on behalf of the holding company and pay over any dividends they may receive.

An investment in a subsidiary is not an investment in the ordinary sense of the word for it gives to the holding company the important function of control over the subsidiary's activities including its financial transactions. From the group's point of view, a subsidiary is analagous to a branch which, by law, happens to enjoy a separate legal entity. If the subsidiary is fully-owned it can be looked upon as an ordinary branch while if it is partly-owned it can be regarded as a branch in which there are outside partners. It is from this outlook that Consolidated Statements of Assets and Liabilities of a group of companies are compiled.

In preparing the Annual Accounts of a holding company one must disclose all information as required by law. Appendix I. contains the relative excerpts from legislation, to which the reader is referred. This treatise, however, deals with general accounting methods suitable for the compilation of Consolidated Accounts. Company Law may change from time to time but changes are more likely to force disclosure of more information and so affect the individual items of an account or balance sheet, rather than to have any effect on general accounting methods of consolidation.

The Consolidated Balance Sheet, or to an Accountant what is perhaps more/

more correctly named the Consolidated Statement of Assets and Liabilities, treats a group of companies as an economic unit from the financial point of view and attempts to show the "Balance Sheet" of that unit. It discloses how the total capital is invested, whether in Property, Plant, Stock, Goodwill, et cetera and by a comparison of the liquid assets with the current liabilities the working capital of the unit can be gauged. The preparation of Consolidated Statements which is the matter dealt with in subsequent chapters, is one of the most fascinating subjects of study to an accountant. Let it be said at the outset that unless the structure of the combine is straight-forward and simple, a diagram of the group should be before the compiler as it will assist him materially during the sometimes long and complicated process of arriving at the Consolidated Statements of Assets and Liabilities and the Consolidated Profit and Loss Account. The Consolidated Profit and Loss Account shows the trading profit or loss of the group and is a necessary and vital supplement to any Consolidated Balance Sheet.

To prepare the consolidated Balance Sheet, the holding company's Balance Sheet is taken, and all the assets and the liabilities of the subsidiaries are brought in to take the place of the one item on the assets side of the holding company's Balance Sheet "Investments in subsidiaries". But aggregation of assets and liabilities under appropriate headings is not enough: necessary and sometimes complicated adjustments have to be made to the totals to arrive at a true financial position of the group. The extent to which each member of the group is owned is taken into account. The holding Company's effective financial interest in certain of the members whose figures are included, may not be substantial. If A. owns $\frac{3}{5}$ ths of B, and B owns $\frac{3}{5}$ ths of C. and C. owns $\frac{5}{9}$ ths of D. A.'s effective financial interest in D. is only $\frac{1}{5}$ th ($\frac{3}{5}$ ths x $\frac{3}{5}$ ths x $\frac{5}{9}$ ths).

When a group is formed, the directors of the holding company virtually have control of all the subsidiaries and sub-subsidiaries and the best practice is for them to lay down certain principles regarding the treatment of matters which affect the annual accounts of all the members. They should determine,

(a) the standard date to which all members are to prepare their Balance Sheet each year.

(b)/

- (b) the composition of Profit and Loss Accounts and Balance Sheet headings so that the same items are to be included under Accrued Charges, Reserves, Stock, et cetera, in all accounts prepared in the future.
- (c) the basis of stock valuation.
- (d) the dividend policy.
- (e) the treatment in the financial books of dividends received and to what extent they should be used to write down the value of investments in respect of pre-acquisition profits.
- (f) especially in the case of fully-owned subsidiaries, whether the book value of fixed assets are to be adjusted in the financial books to true values as arrived at by experts when the shares were acquired.
- (g) the rate of depreciation to be written off each class of asset.

In this way the accounts of all members are standardised and, incidentally, the preparation of the Consolidated Balance Sheet is facilitated. In practice, however, such a utopia is not always found to exist by the Accountant who is preparing the consolidated statements and he must make the necessary adjustments himself on the Balance Sheets presented, in order to standardise the figures of all members of the group and so add like to like which is a sine qua non in the compilation of a Consolidated Statement of real and practical value.

In the many examples used for demonstration purposes in subsequent chapters, shares in subsidiaries are stated "at cost" in the Balance Sheet of the holding company. This may give the reader the erroneous impression that such a valuation is fairly general in practice but the real reason for using it ~~of this basis of valuation~~ is that, for demonstration purposes, it is necessary to have examples which deal with difficult adjustments. The precise treatment of the book value of investments in subsidiaries arises in every case, and often requires careful thought especially when stated "at cost".

The Investments in the subsidiary company will be stated "at cost" when the shares have been newly acquired, and such a valuation may continue to be used for many years. The shares may have appreciated in value since acquisition. Even where they have depreciated they may be left "at cost" since/

since they form part of the fixed assets of the holding company, and therefore there is no legal necessity to provide for depreciation (Lee v. Neuchatel Asphalt Co. Ltd., (1889) 41 ch 1); Vermer v. Gen. and Com. Investment Trust Ltd. 1894 (2 ch 239); Wilmer v. McNamara & Co. Ltd. (1885, 2 ch 245). Where no provision has been made for a fall in value of the shares, a note of the lower market generally appears under the appropriate heading in the holding company's Balance Sheet.

From the cost price of Investments in Subsidiaries there may be deducted dividends credited to Investment Account. Dividends received from the Subsidiary and declared for a period prior to acquisition, must be credited to Investment Account as they are theoretically included in the purchase price of the shares and cannot be regarded as revenue to the holding company. Further dividends or parts of dividends, although declared for a period after purchase, should not be regarded as revenue by the holding company if they are paid out of the pre-acquisition profits of the subsidiary (the balance at credit of Profit and Loss Account and General Reserve at the date the shares were acquired). Such dividends should be credited to Investment Account, as again in theory the full pre-acquisition profits are included in the purchase price of the shares. In this respect revenue from an investment in a subsidiary differs from revenue from an ordinary investment. The holding company, appreciating the fact that pre-acquisition profits of a subsidiary are included in the purchase price of the shares, may adopt the policy of crediting to Investment Account any dividends, or portions of any dividends, for the purpose of writing down the book value of the shares "to cost less the holding company's share of the full pre-acquisition profits of the subsidiary". This policy is recommended (quite apart from the fact that it facilitates the preparation of consolidated statements of assets and liabilities) but there may be practical difficulties which prevent its operation or make it undesirable. For example in the case of a subsidiary with a large credit balance on Profit and Loss Account or General Reserve at acquisition date and subsequently declaring relatively small dividends from current profits, ^{an attempt} by the holding company ~~to attempt~~ to write off the large pre-acquisition profits from the cost price of ^{over a short period of years} the shares [^] would result in little or no revenue from this source being credited to the Profit and Loss Account of the holding company for some years after purchase, ~~unless the writing down was spread over a long period of years.~~

From the cost price of Investments in subsidiaries there may also be deducted amounts written off the value of the investment. The holding company may appropriate part of its own profits to write down the value of the investment. The subsidiary may have become less prosperous or may be incurring losses and it is sound accounting practice, but not compulsory by law, for the holding company to make provision for its share of these losses. As regards the determination of the correct and adequate provision, the test to apply to any particular subsidiary is whether the dividends credited to revenue by the holding company from the subsidiary exceed the holding company's share of the net trading result of the subsidiary since acquisition (net profit or net loss) and then provide a reserve for the amount of the excess or the loss (see example below). The provision is not required if the excess or loss is more than compensated by other subsidiaries' undistributed post-acquisition profits which have not been credited to the holding company's Profit and Loss Account.

As regards dividends received from subsidiaries the view expressed above that, in so far as these have been paid out of the fund of profits existing at the date the shares were acquired, they should not be regarded as revenue by the holding company but must be capitalised and credited to Investment Account as they form a part of the realisation of the purchase price of the shares, is due to the special relation which exists between a holding company and its subsidiary.

An example will show that it is sometimes not possible to determine from what fund of profits dividends have been declared. H. Ltd. purchased all the share capital of S. Ltd. on 31st December 1940 when S. had a credit balance on Profit and Loss Account of £5,000. S.'s Profit and Loss Account for the two years after purchase was as follows:-

Balance at Credit at 31st December 1940	.. .. .	£ 5,000
Profit for 1941	.. .. .	<u>10,000</u>
		£ 15,000
Less: Dividend declared for year 1941	.. .. .	<u>9,000</u>
Balance at Credit at 31st December 1941	.. .. .	£ 6,000
Less: Loss for 1942	.. .. .	<u>8,000</u>
Balance at Debit at 31st December 1942	.. .. .	<u>£ 2,000</u> Dr.

On receipt of the 1941 dividend from S., H. has the option of crediting the entire/

entire dividend to revenue on the grounds that it represents profits earned by S. since acquisition and that the pre-acquisition profits of S. £5,000, are still lying at the credit of S.'s Profit and Loss Account at 31st December 1941 (1 year after acquisition). Alternatively H. may adopt the more conservative and the recommended course of (1) crediting £5,000 of the dividend to Investment Account thereby reducing the value of the shares by the full pre-acquisition profits included in the purchase price and (2) crediting the balance of the dividend (£4,000) to revenue. From the legal point of view either option may be exercised; in the former case the shares would be stated "at cost" in H.'s 1941 Balance Sheet and in the latter case "at cost less dividends credited". The results of S. for 1942 - a loss of £8,000 - demonstrates the unsatisfactory position that can arise, as in the first alternative the pre-acquisition profits of S., regarded by H. as lying at credit of S.'s Profit and Loss Account balance at 31st December 1941, are used up in meeting the 1942 loss. The prudent course for H. to adopt in 1942 would be to appropriate from its own profits a sum to write down the value of the investment in respect of the 1942 loss by S.; the sum in the first alternative would be £8,000 while in the second alternative the sum could be reduced to £3,000, so that in each case over the two years, only £1,000 has been credited to revenue as representing the post-acquisition result (£9,000 - £8,000). H., however, is not compelled by law to make any provision in respect of S.'s 1942 loss.

If S. had declared a dividend for 1941 in excess of the profits earned for 1941, say a dividend of £13,000, this dividend to the extent of £3,000 is being paid out of pre 1941 profits and, in accordance with the views expressed above, on receipt of that dividend H. must credit as a minimum £3,000 to Investment Account and is able to credit as a maximum £10,000 to revenue.

Inter-company trading will be carried on in most groups and it is normally quite in order for subsidiaries or the holding company to sell to other members of a group at prices which include profit. To sell at uneconomic prices affects the rights of the outside shareholders (if any) of the company selling the goods. From the group's stand-point no profit has been earned until the goods are sold eventually to the public and on the accounting principle that "profits"/

"profits" should not include unrealised profit, a holding company should provide a reserve in its financial accounts to cover profit on its own goods sold to a subsidiary in all cases where such goods are unsold to the public at balancing date. This stock reserve should cover the full profit on the unrealised stock or as a minimum the proportion of profit according to the proportion of Ordinary Share Capital held by the holding company (the selling member) in the subsidiary (the buying member). On the other hand where stock is sold by the subsidiary to the holding company (or to another subsidiary) no reserve for any unrealised profit is required in the financial books of the selling subsidiary or the holding company in normal circumstances. The former company does not hold shares in the latter, while the latter company will only be taking credit for dividends received as distinct from profits earned by the subsidiary. In the rather exceptional case of a holding company taking credit for its share of all profits earned by subsidiaries as distinct from dividends received, the holding company will require to provide a full reserve in its financial accounts for all profit earned by any one member in respect of goods ^{and unsold} supplied by any other member at balancing date.

CHAPTER II. Valuation of Shares before Acquisition of a Subsidiary.

When amalgamation of any kind is mooted, the accountant will usually be asked to value the business to be acquired and where any of these businesses are Limited Companies the value of the shares will be brought out by him. The valuation of shares is of accounting interest as a subject in itself but in the exposition of the general theory in this chapter, due regard will be given to the fact that many of the principles involved in the preparation of Consolidated Statements of Assets and Liabilities are rooted to the theory and the subject will therefore be developed from this particular stand-point.

The value or net worth of a business is the figure obtained by an aggregation of the present going-concern value of all its assets and the deduction therefrom of the liabilities to outsiders, including debentures. The value of an Ordinary Share in a Limited Company is the net worth equated to the Ordinary Share Capital. If there are Preference Shares the net worth to the Ordinary Shareholders is reduced by the ^{appropriate} value of the Preference Capital. The Assets include the Goodwill and while the Accountant must rely on experts to value Property, Plant, et cetera, it is his particular task to calculate the value of Goodwill which depends primarily on the earning capacity of the business. If the business is likely to flourish, Goodwill may be computed at a high figure, but if very low profits are expected or, alternatively, if losses are forecasted, Goodwill may have a negative value which has been called "Badwill."

To arrive at a proper valuation of any business, access to all books and records is required.

Computation of Net Capital Employed

Two figures of net capital employed are required, one at valuation date which is used to arrive at the purchase price of the business, and one indicating an average in a representative year of Net Capital employed which is used to compute the value of Goodwill /

to be included in the price will ^{as} at the purchase date.

- (a) Net Capital Employed at valuation date: This figure is arrived at by the accountant, assisted where necessary by experts' valuations, placing a going-concern value on each of the Assets. From an aggregation of these Assets, the Liabilities to outsiders are deducted and the figure of "Net Capital Employed" is brought out. This figure does not take into account the valuation of Goodwill at the purchase date. ~~How~~ It is of special interest to a compiler of Consolidated Statements that the Net Capital Employed figure can be reconciled; it is bound to equal the Share Capital plus Reserves, plus Profit and Loss Account, plus or minus as the case may be, the difference between the going-concern values and the book values of the Assets, and less the full book value, if any, of Goodwill, which is ignored meantime.
- (b) Average Net Capital Employed: This figure is arrived at by a consideration of the average amount of net capital employed - assets valued on a going-concern basis irrespective of the book value - in a recent representative year. In many cases such an average would be approximately equal to the net capital employed figure at the valuation date. Where, however, the valuation date ^{is} ~~is~~ in proximity to the dates of substantial movements of cash, e.g. to pay dividends or National taxation, the average figure would not be likely to agree with the net capital employed figure on the valuation date. The average figure may be computed on a mathematical basis such as is adopted in the Excess Profits Computations, but an approximate figure of average capital employed is all that is required in the normal case. Accordingly one may use round figures, and in many cases take as the average the actual net capital employed at valuation date.

The /

The fair purchase price or net worth of the business is the actual net capital employed figure at valuation date, plus the value of Goodwill, or alternatively, less an allowance for negative Goodwill (i.e. "Badwill"). The two factors which will determine the value of Goodwill are:-

- (1) The prospects of the future i.e. a forecast must be made of maintainable future profits and,
- (2) The fair return which is expected on the average net capital employed in the particular business.

Maintainable Future Profits:

In the estimation of future trading results, the figures of previous periods are a useful guide. The audited Profit and Loss Accounts of the business for the past seven or even ten years therefore are usually set out in columnar form and the figures adjusted,

- (a) to make one year consistent with another by the adjustment of excessive or inadequate depreciation and of Directors' Fees and salaries et cetera and by the elimination of all abnormal credits and charges.
- (b) to make all years consistent with future trading by the insertion of the estimated future duties and taxes in place of those paid in the past and of future remuneration to the management where changes are visualised.
- (c) to make a fair charge for management where no remuneration is debited in the accounts.

The resultant annual figures are used to determine the average annual profits of the past, say, three, five or even ten years, which may be taken as a guide of future maintainable profits. Certain years may require to be ignored altogether to arrive at a fair average e.g. where results, due perhaps to a strike, are abnormal or where the trading results include those of a department or branch which is now closed down and whose figures cannot be segregated with a sufficient degree of accuracy. The trend of the adjusted annual profits is significant. Where there is a marked /

marked continuous rise or fall in profits, an average over a long period is no guide of future results and the figures of one or perhaps two of the most recent years will be a better indication of future prospects.

Difficult though it is, the accountant must arrive at a figure of maintainable future profits before he can value Goodwill.

The Fair Return:

The fair return for any business depends primarily on the rate of return expected at the time on gilt-edged securities, but varies in different classes of businesses and is affected by the realisability of the shares.

- (a) Return from gilt-edged securities: This return governs the rate of return expected in industry; the latter will be usually higher for there is an ever-present risk of loss of capital in industry and this risk is reduced normally and theoretically to a minimum by investment in gilt-edged securities. The words "normally and theoretically" are used advisedly for it is obvious that in times of crisis, or when a government is in power whose policy may foreshadow ^{interference with the rights of Rentiers,} ~~a repudiation or part-cancellation of Government Stocks,~~ a prudent investor may prefer investment in industries at the same or even at a lower rate of return. The nature of the assets and their realisability are factors in determining the risk of loss of capital.

- (b) Class of Business: A speculative industry (gold-mining or a new venture such as ~~wireless~~ and television) will be expected to yield a higher return than the safer and more firmly established business. The greater the gamble, the higher the yield expected is the rule. In an Estate Duty case which came before the Court ^{of Session (Salvesen & Others v C.I.R. 1930)} ~~is known where the~~ accountants acting for the crown were prepared to allow as a fair return, a rate as high as 40 per cent in a very speculative industry (whale fishing) at a time when the yield /

yield from gilt-edged securities was 5%. On the other hand, the Stock Exchange prices show that the return expected in certain well-established and stable companies is sometimes just over the return obtainable at the time in the gilt-edged market.

(c) Realisability of shares: Shares in a large public company which enjoy a day to day quotation of the Stock Exchange and are therefore readily realisable, will not give such a high return as those of a small company whose shares have a more limited market. A higher return still will be expected where shares have practically no market as in the case of a Private Company. Further the Articles of Association of a private company may restrict transfer to a marked extent; sometimes such shares for sale must be offered to existing members at par, irrespective of the prosperity of the company. (In the case of a partnership or a one man firm, the fair return expected will be about the same, or perhaps just a little higher than that of a private company of the ordinary type).

These factors influence the rate per cent. which is considered the fair return in any particular business. This percentage on the figure of average net capital employed (not the share capital figure) gives the fair return expressed in pounds; that is to say by an investment of £x (the average net capital employed figure) a purchaser of these assets can expect profits of £y = $\frac{\text{fair return}}{100} \times \text{£x}$.

Goodwill valuation:

A comparison between the estimate of maintainable future profits and the fair return expressed in pounds on the average net capital employed figure will disclose whether Goodwill or "Badwill" exists in the business as at the purchase date. If the maintainable future profits exceed the fair return, the excess represents the amount of extra or "super" profits expected annually. The capitalised /

capitalised value of these super profits is the Goodwill valuation which added to the actual net capital employed figure gives the fair purchase price of the whole business. In the converse circumstances where the fair return exceeds the maintainable future profits, the super profits are of a negative amount; the capitalised value of which brings out the "Badwill" valuation which deducted from the actual net capital employed figure again gives the fair purchase price or net worth of the business.

The principles governing the capitalisation of super profits must be fully understood. The maximum value is the present value of a perpetuity. This value can be found from interest tables or by formula - the present value of £1 at $r\%$ is $\frac{100}{r}$ - but this maximum value of Goodwill is of theoretical rather than of practical use, as it is unlikely that, in an actual case, one can assert that these super profits/ ^{especially if they are relatively large} can be maintained indefinitely in the future. A prosperous business or class of industry attracts new capital, and the added competition by new ventures will have an effect on the actual future profits of the original business. This was noticeable in the Gramophone and Radio Industry in the twenties of this century. The original companies were prosperous and as a result, many new companies were formed to exploit the thriving industry. The additional competition not only lowered selling prices of the product, but also forced companies to bring out new models more frequently than justified by basic improvements, with the result that super profits were affected adversely and in some cases disappeared altogether. Accordingly, only in the exceptional case would Goodwill be valued by the capitalisation of super profits on the basis of a perpetuity; the more usual method is to take a number of years' purchase price of the super profits say three, five or seven years' purchase price, or better to "scale down" the expected super profits of the future consecutive years until the super profits disappear altogether. The number of years taken or, alternatively, the scaling down used, is a matter of experience and vision as to the likelihood of /

of new and acute competition, - patent rights and monopoly may help to prevent this - as to the time it will take to set up potential new competitors, as to the possibility of a decline in public demand owing to changes in fashion or taste, and as to the probability of future State interference, international disturbance, new tariffs et cetera. As a general rule the higher the super profits, / the fewer the number of years taken or the steeper the scaling down required. This rule gives "weight" to the greater degree of risk involved where super profits are high.

A simple example will demonstrate the recommended method of share valuation. S. Ltd. a well-established business, is being acquired by a holding company. S's. summarised Balance Sheet at purchase date is:-

<u>LIABILITIES</u>		<u>ASSETS</u>	
Sh. Cap. (in £1 Ord. Shs)	£ 20,000	Propy. at cost	£ 8,000
Creditors	1,500	Plant at cost, less	
P. & L. A/c	2,000	depn.	5,500
	<hr/>	Other Assets	9,500
	<hr/>	Goodwill at cost	500
	<hr/>		<hr/>
	£ 23,500		£ 23,500
	<hr/> <hr/>		<hr/> <hr/>

The maintainable future profits have been carefully estimated at £1,875 per annum. The fair return for the business is considered to be say 7½% (Note:- This percentage is used here for demonstration purposes only, and it must not be taken as a criterion of a suitable rate for a company of this size in the general case. The rate adopted in practice must depend on circumstances). The going-concern values of Propy. £8,000 and Other Assets £9,500 are the same as the book values. Plant, however, is considered to have a going-concern value of £5,000.

<u>Solution:</u>				
<u>Actual NET CAP. EMPLOYED</u>		<u>Going- Concern Value.</u>		
Property	£ 8,000	} i.e. Sh. Cap.	£ 20,000	
Plant	5,000		} P. & L. A/c	2,000
Other Assets	9,500			<hr/>
	£22,500		£ 22,000	
<u>Less: Outside liabs.</u>	1,500	<u>Less: Overvaln. of Plant .</u>	500	
	<hr/>		<hr/>	
	£21,000	<u>Less: Book Value of</u>	£ 21,500	
	<hr/> <hr/>	Goodwill (ignored)	500	
			<hr/> <hr/>	
			£ 21,000	
			<hr/> <hr/>	

Valn. /

Valn. of Goodwill:

Maintainable future profits	£ 1,875
Fair return on <u>average net cap.</u> employed $7\frac{1}{2}\%$ on £21,000*	<u>1,575</u>
Extra or Super Profits	£ <u>300 p.a.</u>

* Note: The average net cap. employed figure is not necessarily nor invariably the same as the actual net cap. employed figure at the valn. date. The same figure has been taken in the above for convenience and on the assumption that a fair average figure for a representative year would work out at approximately £21,000.

(a) Maximum valn. Case I:

Super profits £300 capitalised on the basis of the p.v. of a perpetuity.

P.V. of a perpetuity of £1 at $r\%$ = $\frac{100}{R}$
 do. £300 " $7\frac{1}{2}\%$ = $300 \times \frac{100}{7\frac{1}{2}} = 300 \times 13\frac{1}{3} = £4,000$
 (This is equivalent to $13\frac{1}{3}$ years p.p.)

On this basis the business of S. Ltd. is worth

Actual Net Cap. Employed (all Assets except Goodwill) £ 21,000	} This p.p. can be broken up thus:- Sh. Cap. . . . £20,000 P. & L. A/c <u>2,000</u> £22,000
Goodwill <u>4,000</u>	
Maximum Purchase Price . . £ <u>25,000</u>	
(equivalent to 25/- per £1 Ord. Sh.)	} <u>Less:</u> Overvaln. of bk. value of Plant <u>500</u> £21,500 Goodwill as valued £4000 Less: Bk. value <u>500</u> Hidden Goodwill .. <u>3,500</u> <u>£25,000</u>

Note: By ignoring the valn. of Assets and simply capitalising the maintainable future profits one can arrive at the above valn. of S. Ltd. in total thus:-

£1,875 p.a. to give a return of $7\frac{1}{2}\%$ can justify a cap. of
 $£1,875 \times \frac{100}{7\frac{1}{2}} = £25,000.$

It should be noted here that such a "short-cut" method is equivalent to the ~~case~~ capitalisation of super profits on the basis of the perpetuity.

The /

The break-up of the purchase price is given to introduce the subject of preparing Consolidated Statements which is considered in the chapters which follow. Meantime it should be observed that if any of the purchase price figures is in fact paid out at a later date by S. Ltd., as a dividend from the £2,000 balance at credit of Profit and Loss Account at the purchase date, the holding company on receipt of the dividend, irrespective of the date it is declared to be paid, cannot regard it as revenue for it is really a part-realisation of the purchase price. The holding company must credit such dividends to Investment Account and so reduce the book value of the shares bought. In Consolidated Statements the subsidiary's Profit and Loss Account balance at acquisition date is similarly treated - it is not revenue to the group but was paid for in the price of the shares to the holding company.

(b) Practical valn. Case II.

The super profits of £300 p.a. cannot be expected to continue indefinitely. ^{If new and active competition was to be expected} it might be reasonable to suggest they would continue undisturbed for 3 years, for the following 2 years they would be halved; for the 6th year, halved again and after the 6th year disappear altogether. On this basis, the scaling down of the super profits would be:-

3 years at £300 p.a.	£900
2 years at £150 p.a.	300
1 year at £ 75 p.a.	<u>75</u>
Giving a Goodwill valn. of	<u>£1,275</u>
or say the round figure of	<u>£1,300</u>

The fair p.p. of S. Ltd. is therefore:-

<p>Actual Net Cap. Employed (going-concern values) £ 21,000</p> <p>Goodwill (super profits scaled) <u>1,300</u></p> <p>Net worth of S. Ltd. £ 22,300</p> <p>(equivalent to $22\frac{3}{4}$ per £1 Ord. Sh.)</p>	<p>This p.p. can be broken up as before, thus:</p> <p>Sh. Cap. £ 20,000</p> <p>P. & L. A/c <u>2,000</u></p> <p style="text-align: right;">£ 22,000</p> <p>Less:</p> <p>Overvaln. of bk. value of Plant <u>500</u></p> <p style="text-align: right;">£ 21,500</p> <p>Goodwill total value</p> <p style="text-align: right;">£1,300</p> <p>Less: v. in B/S <u>500</u></p> <p style="text-align: right;">Hidden Goodwill <u>800</u></p> <p style="text-align: right;"><u>£ 22,300</u></p>
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In practice a common alternative method of computing Goodwill is simply a reasonable number of years' purchase price of the super profits. In the above, say, 5 years' purchase price of the super profits, £300, would give a Goodwill valuation of £1,500. Or again the present value of a terminable annuity of the super profits for the 5 years could be taken which would bring out a valuation of a little less than £1,500, but it might be considered too meticulous a refinement to take interest into account in this matter. Both these alternatives ignore the gradual diminution of profits which is more likely to happen as an actual fact. The scaling down method is therefore recommended.

It will be appreciated from the above examples that the valuation of Goodwill depends to a large extent on opinion. The Accountant requires wide vision and highly technical experience to determine fair and equitable figures for (a) Maintainable future profits (b) the fair return and (c) the scaling down of super profits. A slight error of judgment may materially affect the final result.

It has been pointed out that where super profits exist, the calculation of Goodwill based on the perpetuity value of the super profits has seldom practical value, although it does bring out the maximum figure. On the other hand, where the super profits are of a minus quantity, the perpetuity basis has a real practical use as will be seen when "Badwill" is considered.

"Badwill"

"Badwill" exists when the fair return expressed in pounds, on the average net capital employed figure exceeds the estimated maintainable future profits. If in the original example all the facts remain the same except that the maintainable future profits had been estimated at £1,000, then the value of S. Ltd. might be arrived at as follows:-

Actual Net Cap. Employed - going concern values - as before	£ 21,000
Maintainable future profits	£ 1,000
Fair Return on average Net. Cap. Employed fig. $7\frac{1}{2}\%$ on £21,000 (average net cap. employed)	1,575
<u>Super Profits - minus</u>	£ <u>575</u>

There /

There is therefore no Goodwill in the business, and indeed a purchaser is not likely even to be willing to pay £21,000 (the actual net capital employed figure), for an investment of £21,000 would only give a return of $4\frac{3}{4}\%$ ($\frac{1,000}{21,000} \times 100$) which is less than the fair return expected of $7\frac{1}{2}\%$. He would therefore probably offer something less. Based on the expected future earnings only, he would deduct from the £21,000 the capitalised value of the negative super profits, namely,

Minus £575 capd. on the basis of a perpetuity $\frac{100}{7\frac{1}{2}} = £ 7667$

Case III. The purchase price on this basis would be:-

Actual Net Cap. Employed figure	£ 21,000
<u>Less: "Badwill"</u>	<u>7,667</u>
Minimum value of S. Ltd.	<u>£ 13,333</u>

(Equivalent to $13\frac{3}{4}d$ per £1 Ord. Share)

Note: £13,333 invested and yielding $7\frac{1}{2}\%$ gives an income of £1,000 p.a. - the expected maintainable future profits.

The proprietors of S. Ltd. would not be willing to sell the business for £13,333 if the break-up value of the Assets less Liabilities would realise more than this sum. Hence the break-up value of the business may determine the worth of the business in such circumstances and also in cases where not profits but losses are expected in the future.

A purchaser may be confident that by economies and re-organisation, the future results will tend to improve. He might consider that 4 years must elapse before any increase in profits could be expected, and that a further 3 years would pass before the fair return of $7\frac{1}{2}\%$ on the net capital employed figure could be looked for. While the seller can hardly hope to reap the benefit of the purchaser's reorganisation scheme, the purchaser might have a price in his mind which at any rate might make him a very willing buyer at £13,333 or the higher alternative break-up valuation, and which might tend to make him increase his offer. The position here is that compromise may be necessary if negotiations are to be concluded /

concluded successfully. The maximum price which the buyer might have in his mind is arrived at by the scaling down of the ^{shortages or what may be termed the} negative super profits so that the figure of "Badwill" is restricted.

4 yrs. at minus £575	£ 2,300)	profits increasing slowly as the reorganisation of the business proceeds
2 yrs. at minus £300 (say)	600)	
1 yr. at minus £100 (say)	100)	

Minimum "Badwill" £ 3,000

Case IV. The p.p. is therefore:-

Actual Net Cap. Employed figure	£ 21,000
Less: "Badwill"	<u>3,000</u>
Average Net Cap. Employed	Value of S. Ltd.
	<u>£ 18,000</u>

(equivalent to 18/- per £1 Ord. Share)

The bargain might be concluded at any figure over £13,333 (13/4 per Share) up to £18,000 (18/- per Share) according to the circumstances of the case.

Note: If the reorganisation required capital expenditure which could only be made out of borrowed money, the interest thereon would require to be taken into account. The interest would reduce the expected future profits.

The Effect of Surplus Cash.

A small point arises where there is surplus cash in the business which is being purchased. In the calculation of the fair price, the surplus cash may be either included in the average net capital employed figure and the income which it is earning - usually it will be invested - included in the maintainable future profits, or alternatively the item may be ignored from both these figures.

Usually the latter method will bring out a higher valuation of Goodwill and so increase the purchase price. This is due to the fact that the fair return expected from the business will be higher than the actual yield given by the investing of the surplus cash in

Government Securities et cetera. This method should be adopted only where there is a sufficient balance at credit of Profit and Loss Account to cover the surplus cash so that, after purchase, the surplus cash can be paid away as dividend and the purchaser of the business /

business will then recover immediately the actual addition made to the purchase price in respect of the surplus cash.

Ex. Let it be assumed that in the first example (case 1) Other Assets £9,500 included £1,000 invested in Government Stocks at 4%, and that this £1,000 was considered surplus cash in the business. The alternative calculation of the purchase price of S. Ltd. - taking the basis adopted in the maximum valuation computation (case 1) for the purposes of comparison - would be:-

Actual Net Cap. Employed at valn. date	£ <u>21,000</u>
Average Net Cap. Employed (exclude Surplus Cash £1,000 in total since the balance on Profit & Loss A/c is greater in amount. If the Profit & Loss A/c balance had been less, say £600, then only £600 of Surplus Cash should have been excluded from the average net cap. employed)	£ <u>20,000</u>

Valn. of Goodwill:

Maintainable future profits (excluding £40 int. recd.)	£ 1,835
Fair return on av. net cap. employed fig. $7\frac{1}{2}\%$ on £20,000	<u>1,500</u>
<u>Super Profits</u>	<u>£ 335</u>

Super Profits capitalised on the basis of a perpetuity gives valn. of Goodwill at £4467. ($335 \times \frac{100}{7\frac{1}{2}}$)

The p.p. of the business, previously £25,000, is now:-

Actual Net Cap. Employed at valn. date	£ 21,000
Goodwill	<u>4,467</u>
<u>Maximum p.p.</u>	<u>£ 25,467</u>

The price is higher by £467^{*}, but the purchaser is taking the view that the surplus cash is not necessary to earn the maintainable future profits, and that immediately after acquisition of the business, he can realise the small investment in Government Stocks and utilise the cash to pay a dividend of £1,000 from the balance at credit of Profit and Loss Account £2,000. As this dividend will be credited to Investment Account by the purchaser, the net cost of the business is reduced by £1,000 to £24,467. On the net investment of £24,467 he can expect annual profits of £1,835 which yield him the required $7\frac{1}{2}\%$.

* This is of course the capd. value of the excess of $7\frac{1}{2}\%$ on the surplus cash,

over the actual int. recd. thus:- $7\frac{1}{2}\%$ on £1,000	£ 75
Actual Int. recd. on £1,000 Invest ^d	<u>40</u>
Capitalised value $\frac{100}{7\frac{1}{2}} \times 35 = £467$.	<u>Excess £ 35</u>

The Relation of Share Valuation Principles to Consolidated Statements

The general theoretical principles of the valuation of a business are of importance in an understanding of the adjustments which require to be made during the preparation of a Consolidated Statement of Assets and Liabilities. The purchase price of the shares is broken up as far as the facts of the case will allow. A proportion represents the balance at credit of Profit and Loss Account (or Reserve) and if there are hidden reserves owing to an under-valuation of specific fixed assets, these are also regarded as part of the price. The balance of the price, set against the par value of the shares, represents either a payment for Goodwill, or an allowance made for "Badwill" as the case may be. Stated diagrammatically the position is:-

<u>Purchase Price</u>	<u>"Break up" of p.p. for Consd. St^t. Purposes</u>	
Actual Net Cap. Employed (going concern value of Assets, less. outside liabs.) X	{ Sh. Cap. (Bal. at cr. of Reserves	+ a b
	{ Bal. on P. & L. A/c	+ c
	{ Undervaln. of specific assets (overvaln. of assets - d)	+ d
Goodwill Y (or Badwill - y)	{ Goodwill per B/S. (Hidden Goodwill (or Hidden "Badwill" - m)	+ l m
Purchase Price = X ± Y	= (a + b ± c ± d) + (l ± m)	

The valuation of shares dealt with in the chapter, is on the basis that the buyer purchases sufficient shares to give him a controlling interest. A Share Valuation for ordinary investment purposes is a different matter, since the buyer has no real control over the company in which his money is invested and he is more concerned with the expected future dividends than the expected future profits, and the difficulty he will experience when he wishes to sell his small lot of shares. Generally a lower price would be the fair price of shares acquired as an investment only, as compared with the price given for a block of shares which give the purchaser /

purchaser control of the company.

The formula for valuation of an ordinary investment is therefore:-

$$\frac{\text{Expected av. future annual dividend rate}}{\text{yield required.}} \times \text{par value of sh.}$$

Preference Shares and the "Gearing" of Share Capital structure.

A survey of share valuation, however brief, should cover the case where part of the capital is in Preference Shares since this state of affairs is so often found to exist in practice. The relative amounts of Preference and Ordinary Capital in the structure of the share capital of any company, has been well-named the "gearing" of the share capital structure. If a company has a relatively large Preference Capital compared to the Ordinary Capital i.e., is "high geared", a slight rise or fall in profits will affect to a marked extent the rate of dividend payable to the Ordinary Shares. Thus the Ordinary Shares of a "highly geared" capital structure are more speculative and therefore demand a higher return than these of a business similar in all respects except that it has a relatively small Preference Capital - a "low geared" capital structure - or no Preference Capital at all. In the valuation of the Ordinary Shares of a company with a "highly geared" capital structure, it is unsatisfactory simply to make a guess at the increase in the fair return expected, due to this new speculative element, and there is an alternative method of calculation which restricts the margin of error which can arise. This alternative method is therefore recommended and will be explained in detail in the remainder of this chapter. As it is rather specialised, the reader may prefer to delay study of it until he has reached chapter XI.

According to the principles outlined in the previous sections, the fair purchase price of any business can be computed in total, and this total valuation will not alter even although the share capital consists /

consists of more than one class of share. The total price, however, will require to be allocated between Preference Capital, Ordinary Capital, et cetera, if the value of each type of share is required. Where there are Preference and Ordinary Capitals the market value of the Ordinary Capital must be the total value of the business less the market value of the Preference Capital. Since the market value of Preference Capital can be ascertained with a greater degree of accuracy than that of Ordinary Capital this method of valuation of Ordinary Shares is suggested where both types of capital exist. The value of a Preference Share is kept within narrower limits, and the possible variation in the price is narrowed further when the company is earning more than sufficient profits to cover the annual preference dividend. The factors which determine the value of a Preference Share are:-

- 1) The number of times the Preference dividend is covered by the maintainable future profits.

This factor takes into account the gearing of the capital structure; the greater the amount of Preference Capital in relation to total capital, the fewer the number of times the preference dividend thereon is covered by the same annual profits. When profits are scaled down in the determination of Goodwill, the figure of profit used to ascertain the number of times the Preference Dividend is covered, may be taken as the average of the expected future profits for say the next 5 years.

- 2) The type of Preference Capital. This covers the right of the Preference Shareholders to the profits where they may be entitled to a Cumulative or non-cumulative dividend. It also covers the rights they may have in a winding up where they may or may not be entitled to priority of repayment of capital (with or without dividend arrears) before the Ordinary Shareholders.

- 3) The return ruling in the gilt-edged market, the class of business and the realisability of the shares all as in the case of valuation of Ordinary Shares which has been dealt with.

- 4) The /

4) The amount of the accrued Preference dividend at date. The influence of this factor is ignored meantime and the requisite amount added to the price at a later stage of valuation.

The first factor is likely to cause the greatest difficulty and, accordingly, the valuation of Preference and Ordinary

Shares will be considered in the following three circumstances:-

(a) Where the Preference Dividend is expected to be covered by future profits.

(b) Where it is not expected to be covered by them, and

(c) Where it is not expected to be covered by immediate future profits but profits are likely to improve to an extent that the Preference dividend will eventually be covered.

(a) Annual Preference dividend covered by expected annual profits:

The fair return on the Preference Capital will be less than the fair return taken for the entire business and will be greater than the return expected in the gilt-edged market. It lies somewhere between these two rates. In the previous example of S. Ltd., if part of the Capital was Preference Capital, the fair return thereon would lie between $2\frac{1}{2}\%$, (say), the return on gilt-edged securities, and $7\frac{1}{2}\%$, the fair return adopted for the particular business. If the Preference Capital was of small amount ("low geared" Capital structure) and the Preference dividend was covered many times by the annual profits, the fair return would be just over the rate expected in the gilt-edged market. It might be taken as $4\frac{1}{2}\%$ or 5% in view of the unrealisability of the shares of S. Ltd., a small company. As a rough guide, it may be stated that in the Stock Exchange market, a Preference Share of a large public company is considered really well covered if the average profit covers the Preference dividend ten times or more, and that a Preference Share in such circumstances and enjoying a free market might yield perhaps a $\frac{1}{2}\%$ more than the yield given from a gilt-edged security. On the other hand, if the Preference Capital is of a relatively large amount ("highly /

("highly geared" Capital structure) and the Preference dividend is covered only a few times by the average profits, the fair return on the Preference Capital will be higher. As the number of times covered decreases, the fair return increases, and tends to equal the fair return, ($7\frac{1}{2}\%$ in the case of S. Ltd.) for the whole business.

Once the fair return expected on the Preference Share is ascertained, a comparison with the rate of dividend to which the Preference Share is entitled under the Memorandum and Articles of Association of the company will give all the data required to value the Preference Shares. If, owing to such features as a general fall in interest rates and/or a rise in the number of times the Preference dividend is covered by recent annual profits, the fair return on a 5% Preference Share is considered to be $4\frac{1}{2}\%$ when the Preference Shares are being purchased, the fair price of the £1, 5% Preference Share is $\frac{5}{4\frac{1}{2}} \times 20/- = 22/3\frac{1}{2}$. Conversely if the fair return on a 5% Preference Share is considered to be 6% when the Preference Shares are being purchased the fair price of the £1, 5% Preference Share is $\frac{5}{6} \times 20/- = 16/8d$. The formula is -

Market value of a Preference Share =

$\frac{\text{Rate of dividend per Articles of Association}}{\text{Fair rate of return expected at valuation date}} \times \text{Par value of share}$

In many cases the fair price may be par value.

It will be found that the computation of the market value of the Ordinary Capital by this method of the deduction of the market value of the Preference Capital from the total purchase price of the business, gives effect to the fact that the Ordinary Capital is then entitled to a higher yield per cent than the fair return used where Share Capital consists of Ordinary Shares only. This higher yield is expected in consideration of the restriction of the maintainable future profits by the amount of the annual Preference dividend and the restriction of the value of the business to the Ordinary Shareholders, by the prior capital rights of the Preference /

Preference Shareholders. The new theoretical fair return on the Ordinary Shares of a company with Preference and Ordinary Capital can be stated as a formula thus:-

$$\text{Fair return per cent to Ordinary Capital} = \frac{\text{Maintainable future profits} - \text{annual Preference dividend}}{\text{total value of business} - \text{market value of Preference Capital}} \times 100$$

To demonstrate the proof and application of the formula, the previous figures of S. Ltd. will be used for convenience. A summary of the figures is:-

S. Ltd. Net Employed £31,000. Fair Return for whole business $7\frac{1}{2}\%$ Sh. Cap. £20,000

Maintainable future profits £1875 Maintainable future profits £1,000

Case 1	Case 2	Case 3	Case 4
Super profits capd. on the basis of a perpetuity	Super profits scaled down	Negative super profits capd. on the basis of a perpetuity	Negative super profits scaled down
Value of business £25,000 of which Goodwill is £4,000	Value of business £22,500 of which Goodwill is £1,500	Value of business £15,535 after deducting "Badwill" of £7,667	Value of business £18,000 after deducting "Badwill" of £5,000

Proof /

Proof of formula. Let it be assumed that the Share Capital of S. Ltd. is 10,000 5% Cumulative Preference Shares of £1 each, and 10,000 Ordinary Shares of £1 each and that the return expected on the Preference Shares is now 6% giving a market value of 16/8 per Preference Share ($\frac{5}{6} \times 20/-$)

In Case 1

The new fair return to Ord. Cap. is per formula $\frac{£1875 - £500}{£25,000 - 10,000 \text{ shs. at } 16/8}$ $\frac{£8,535}{£8,535}$ = 8.25%

Value of Ord. Cap. is $\frac{100}{8.25} \times £1375$ (maintainable future profits to Ord.) = £16,667

" " " " 10,000 shs. at 16/8 ($\frac{5}{6} \times 20/-$) 8,535

Total Value of S. Ltd. as before (P.II(8)) £25,000

Valn. of Goodwill
Maintainable future profits falling to Ord. Shs. £ 1,375

Net. Cap. Emp. fig. £21,000
 Less: Pref. Cap. at market price 8,535

£12,667 New fair return on £12,667 at 8.25% 1045

Super Profits
 Capd. on basis of a perpetuity $350 \times \frac{100}{8.25}$

£ 350
 £4,000
 (as before)

In Case 2

$\frac{£1875 - £500}{£22,500 - 10,000 \text{ shs. at } 16/8}$ $\frac{£8,535}{£8,535}$ = 9.845%

$\frac{100}{9.845} \times £1375$ = £13,967

8,535

£ 22,500

£ 1,375

£12,667 at 9.845% 1,247

£ 128
 £ 1,300
 (as before)

Mathematical Note. The perpetuity basis is reqd. in Case 2 although the super profits were scaled in the original computation of Goodwill.

Market price of £1 Ord. Shares _____

(a) Fair return on Ord. Cap. held -
per formula 1st year _____

(b¹) Fair return on Ord. Cap. held -
per formula 7th year on the
basis that all dividends received
for years 1-6 cr. to revenue _____

(b²) or alternatively for the 7th
year on the basis that divids
recd. for years 1-6 are Cr.
to Investment Account in so
far as they exceed $7\frac{1}{2}\%$ _____

* Note: Original Price of Ord. Cap. - £20,300
Less: Divids. Cr. to Investment
A/c. in years 1-7 - 1,300
£19,000

Case 3 - Value of business £13,333. Price based on forecast that future profits will be steady and about £1,000 p.a.

Market price of £1 Ord. Shares _____	22/3 $\frac{1}{2}$	27/11	43/- $\frac{1}{2}$	84/6 $\frac{1}{2}$
Fair return on Ord. Cap. held - per formula 1st year _____	1,875 x 100 = <u>22,300</u> 8.4%	(1,875 - 500) 100 = <u>22,300 - 8,333</u> 9.8%	(1,875 - 750) 100 = <u>22,300 - 11,539</u> 10.5%	(1,875 - 900) 100 = <u>22,300 - 13,846</u> 11.5%
Fair return on Ord. Cap. held - per formula 7th year on the basis that all dividends received for years 1-6 cr. to revenue _____	1,575 x 100 = <u>22,300</u> 7.1%	(1,575 - 500) 100 = <u>22,300 - 8,333</u> 7.7%	(1,575 - 750) 100 = <u>22,300 - 11,539</u> 7.7%	(1,575 - 900) 100 = <u>22,300 - 13,846</u> 8.0%
or alternatively for the 7th year on the basis that divids recd. for years 1-6 are Cr. to Investment Account in so far as they exceed $7\frac{1}{2}\%$ _____	1,575 x 100 = <u>21,000</u> 7.5%	(1,575 - 500) 100 = <u>21,000 - 8,333</u> 8.5%	(1,575 - 750) 100 = <u>21,000 - 11,539</u> 8.7%	(1,575 - 900) 100 = <u>21,000 - 13,846</u> 9.4%
Prof. Divd. covered by total profits _____	10 times 5%	2 times <u>6$\frac{3}{4}$</u>	1 $\frac{1}{3}$ times 7%	1 time <u>7$\frac{1}{4}$</u>
Fair return on Pref. Cap, say, _____	20/- £ 2,000	15/4 $\frac{1}{2}$ £ 7,692	14/3 $\frac{1}{2}$ £ 10,714	13/9 $\frac{1}{2}$ £ 12,414
Market price of £1 Pref. Shares _____	£ 13,333	£ 11,333	£ 10,714	£ 12,414
Market value of Pref. Capital _____	£ 13,333	£ 13,333	£ 13,333	£ 13,333
" " of Ord. Capital _____	£ 13,333	£ 13,333	£ 13,333	£ 13,333
Total value of business - Market Price of £1 Ord. Shares _____	13/4	11/3 $\frac{1}{4}$	10/5 $\frac{1}{2}$	9/2
Fair return to Ord. Cap - per formula _____	1,000 x 100 = <u>13,333</u> 7.5%	(1,000 - 500) 100 = <u>13,333 - 7,692</u> 8.9%	(1,000 - 750) 100 = <u>13,333 - 10,714</u> 9.5%	(1,000 - 900) 100 = <u>13,333 - 12,414</u> 10.9%

Case 4/

Case 4 - Value of business £18,000. Price based on forecast that future profits will increase from about £1,000 p.a. in the 1st year to about	Ord. Shs £ 20,000 5% Pref " - £ 20,000	Ord. Shs £ 18,000 5% Pref" 2,000 £ 20,000	Ord. Shs £ 10,000 5% Pref " 10,000 £ 20,000	Ord. Shs £ 5,000 5% Pref " 15,000 £ 20,000	Ord. Shs £ 2,000 5% Pref " 18,000 £ 20,000
£1,575 p.a. in the 7th year					

Note: Although the buyer made a deduction of £3,000 from the price to cover the shortage of profits expected in years 1-6, it is not permissible for him to reverse the procedure recommended in Case 2. Hence the return on the Ordinary Capital will be less than the fair return for the first six years and thereafter greater than the fair return.

Pref. divd. covered by total profit 1st yr. - do. do. 7th yr. -	10 times 15 3/4 "	2 times 3 "	1 1/2 times 2 "	1 1/2 times 2 "	1 1/2 times 2 "
Fair return on Pref. Capital - say -	5%	6 1/2%	6 1/2%	6 1/2%	6 3/4%
Market price of £1 Pref. Shares -	20/-	15/4 1/2	15/4 1/2	15/4 1/2	14/9 3/4
Market value of Pref. Capital -	£ 2,000	£ 7,692	£ 11,539	£ 11,539	£ 13,333
Market value of Ord. Capital -	£ 16,000	10,308	6,461	6,461	4,667
Total value of business - £ 18,000	£ 18,000	£ 18,000	£ 18,000	£ 18,000	£ 18,000
Market price of £1 Ordinary Shares -	18/-	20/7 1/4	25/10	25/10	46/8
(a) Fair return on Ord. Cap. held - per formula - 1st year -	$\frac{1,000 \times 100}{18,000} = 5.5\%$	$\frac{(1,000 - 500)100}{18,000 - 7,692} = 4.8\%$	$\frac{(1,000 - 750)100}{18,000 - 11,539} = 3.9\%$	$\frac{(1,000 - 750)100}{18,000 - 11,539} = 3.9\%$	$\frac{(1,000 - 900)100}{18,000 - 13,333} = 2.1\%$
(b) Fair return on Ord. Cap. held - per formula - 7th year -	$\frac{1,575 \times 100}{18,000} = 8.75\%$	$\frac{(1,575 - 100)100}{18,000 - 2,000} = 9.2\%$	$\frac{(1,575 - 500)100}{18,000 - 7,692} = 10.4\%$	$\frac{(1,575 - 750)100}{18,000 - 11,539} = 12.8\%$	$\frac{(1,575 - 900)100}{18,000 - 13,333} = 14.5\%$
Average of (a) and (b) -	7.1%	7.4%	7.6%	8.3%	8.3%

* Explanatory note, taking this case as an example

	1st year	7th year
Maintainable future profits	£ 1,000	£ 1,575
Less: Pref. divd. to be met 5% on £15,000.	750	750
Balance falling to 5,000 Ordinary Shares..	£ 250	£ 825
equivalent to a dividend of	5%	16 1/2%
At a price of 25/10d for an Ordinary share	$\frac{1}{25} \times 100 = 3.9\%$	$\frac{3/3 1/2}{25} \times 100 = 12.8\%$
the return is	as above	as above

Where the Preference Shares are entitled to an accrued Preference dividend at the Balance Sheet date, this must also be taken into account. The total value of the Preference Capital will increase by the amount of the accrued Preference dividend with a corresponding reduction to the total value of the Ordinary Capital. An accrued Preference dividend is a liability which will deplete the profits available to the Ordinary Shareholders at the purchase date. Ex. Take Case 2 with £10,000 of Preference Capital and assume there is a 4 months' Preference dividend due up to Balance Sheet date.

10,000 Pref. Shs. valued at 16/8	£8,333
<u>Add:</u> Pref. divd. to date . . . 5% for 4 mths.	<u>167</u>
New value of Pref. Cap. (17/- per sh.)	£8,500
10,000 Ord. Shs. valued at 27/11	£13,967
<u>Less:</u> Accrued Pref. divd.	<u>167</u>
New value of Ord. Cap. (27/7 per sh.)	<u>13,800</u>
Total value of S. Ltd. as before	<u>£22,300</u>

It is claimed that in cases where Share Capital is composed of Preference and Ordinary Shares, the foregoing method of valuation is the simplest and is applicable even in the most difficult case of a very highly geared capital structure. It might be thought that the Ordinary Shares can be valued by the deductions of Preference Capital at par, and of the annual Preference dividend respectively from the Net Capital Employed figure and the maintainable future profits in the first instance. This is equivalent to the assumption that Preference Capital is analagous to a loan or debenture.

Preference Capital, however, differs from a loan, for while a loan interest burden, whatever the rate, can be eliminated by a repayment of the loan at par, the only usual way by which a purchaser of all the Ordinary Capital can receive all the profits of the company, is by acquisition of all the Preference Capital as well as the Ordinary Capital. The acquisition of Preference Capital can only be made at market value which may or may not correspond to par value.

b) Annual Preference dividend not covered by the expected annual profits.

The valuation of a Preference and Ordinary Share where the expected profits are so low that they are insufficient to meet the Preference dividend, can be demonstrated by examples in which previous facts and figures will be used for simplicity. The formula already given, namely the value of a preference share =

$$\text{par value} \times \frac{\text{rate of Preference dividend per Articles of Association}}{\text{fair rate of return on Preference Capital expected at valuation date.}}$$

must be modified. The rate of dividend per A. of A. is not likely to be paid owing to the shortage of profits; it is therefore replaced by the rate of dividend (a lower rate) expected to be paid on the Preference Shares from the future profits. As regards the rate of return expected by a purchaser of Preference Shares at the valuation date, this will be increased to a rate equal to or tending to equal the fair rate of return expected for the entire business, since the preference dividend is not covered by, but will in fact absorb, all the expected future profits.

S. Ltd. Net Capital Employed . . .	£21,000) Facts as in Case 3 page 11
Fair return expected for the whole business . . .	7½%	
Expected maintainable future profits	£1,000 p.a.	
Valn. of business as a whole	£13,333 ("Badwill valued at £7667 by the capn. of neg. super profits on the basis of a perpetuity")	

Let it be assumed now that the Share Capital of S. Ltd. is:-

<u>Case 5</u>	<u>Case 6</u>
£18,000 8% Non-Cum. Pref. Shs. of £1 ea. (Pref. divd. £1440 p.a.)	£25,000 6% Non-Cum. Pref. Shs. of £1 ea. (Pref. divd. £1500 p.a.)

2,000 Ord. Shs. of £1 ea. 5,000 Ord. Shs. of £1 ea.

£20,000 Total Cap. as in Case 5 £30,000 (this is £10,000 more than in Case 3 but let it be assumed that the book value of S's. Assets are overvald. by £10,000, e.g. Goodwill is valued in S's. B/S at £10,500.)

In each case the Preference dividend cannot be met out of the expected annual profits of £1,000 so that the Preference Capital will take all the profits and no dividend can be expected on the Ordinary Capital.

	<u>Case 5</u>	<u>Case 6</u>
Pref. divd. expected to be restricted to	$(\frac{1000}{18000} \times 100 = 5.5\%)$ $5\frac{1}{2}\%$	$(\frac{1000}{25000} \times 100 = 4\%)$ 4%
Therefore value of the £1 Pref. Sh. is (see formula below) . . .	$14/8 \text{ ea. } (20/- \times \frac{5\frac{1}{2}}{7\frac{1}{2}})$	$10/8 \text{ ea. } (20/- \times \frac{4}{7\frac{1}{2}})$
Value of Pref. Cap. is	$\text{£}13,200 \text{ (18,000 Pref. Shs. at } 14/8 \text{ ea.)}$	$\text{£}13,333 \text{ (25,000 Pref. Shs. at } 10/8 \text{ ea.)}$
	<p>Note: If 5.5% had been taken the valn. of the Pref. Cap. would work out at exactly £13,333</p>	
" " Ord. " "	<u>Nominal</u> say 1/- per sh.	<u>Nominal</u> say 6d per sh.
Total value of S. Ltd.	<u>£13,333</u>	<u>£13,333</u>

From the above it will be seen that, where expected annual profits are insufficient to meet the annual Preference dividend the formula for valuing a Preference Share is -

$$\text{Market Value of Pref. Sh.} = \text{Par value of Pref. Sh.} \times \frac{\text{rate of Pref. divd. expected to be paid from future profits}}{\text{fair rate of return for entire business expected at valn. date.}}$$

The Ordinary Shares in such circumstances have a purely speculative nominal value.

Where Preference Shares are cumulative, any arrears at the date of valuation would hardly affect the above valuation figures. The possible effect would be to increase by a few pence the value of the Preference Share.

In both the above valuations the price of the Preference Share (14/8 and 10/8 respectively) would give a purchaser a return of 7½% which /

which is the fair return expected from the whole business and therefore the return used to compute the value of the Ordinary Share in the original cases 1 - 4. The return on the Preference Capital is not less than the fair return expected from the whole business because the preferential right has a disadvantage as well as an advantage. The Preference dividend while a first charge on profits, is restricted, if future profits improve, to the maximum dividend of 8% (Case 5) and of 6% (Case 6) stated in the Articles of Association. If, therefore, S. Ltd. owing to unforeseen circumstances began to earn large profits a purchaser of Preference Shares at $14/8$ (Case 5) or $10/8$ (Case 6) would receive a maximum dividend of 8% p.a. or 6% p.a. respectively, which gives a maximum return of 10.9% ($\frac{\pounds .08}{14/8}$ Case 5) or 11.2% ($\frac{\pounds .06}{10/8}$ Case 6) for the year in question. If S's. Capital consisted of Ordinary Shares only a purchaser of these Ordinary Shares would suffer no such restriction.

In cases where not profits but losses are expected in the future, both the Preference and Ordinary Shares have simply a nominal speculative value based on the break-up valuation of the business and the likelihood of liquidation. The legal rights of the classes of shares would be of moment. Preference Shares in a winding up may or may not enjoy a preference for capital with or without arrears of dividend.

c) Annual Pref. divd. not covered by immediate expected annual profits but profits likely to improve to an extent that the Pref. divd. is covered.

The valuation of a Preference Share in these circumstances is a delicate matter since so much depends on the forecast made of the upward trend of profits. The rate of Preference dividend expected to be paid annually in the future will increase and one must arrive at a fair average rate over a reasonable number of years, say from 3 to 10 years according to the extent one can forecast profits with a certain amount of confidence. As regards the rate of return expected by a purchaser of Preference Shares at the valuation date this /

this rate will only usually tend to equal, and seldom equal the fair rate of return for the entire business. The formula for valuing a Preference Share as stated in the previous sub-section must be amended and is:

$$\frac{\text{Par value of the Preference Share} \times \text{av. rate of Pref. divd. expected to be paid from future profits}}{\text{a rate tending to equal the fair rate of return for the entire business at valn. date.}}$$

Ex. S. Ltd. Net Cash Employed £21,000

Fair return expected for the whole business 7½%

	<u>1st-4th yr.</u>	<u>5th & 6th yr.</u>	<u>7th yr.</u>	<u>8th yr.</u>	} Facts as in Case 4, page 12
	incl.				
Expected future profits	£1000	£1275	£1475	£1575	
Valn. of business	£18,000 (badwill valued at £3000 by a scaling down of negative super profits based on the above forecast).				

Let it be assumed now that the Share Capital of S. Ltd. is:

<u>Case 7</u>	<u>Case 8</u>
£18,000 8% Non Cum. Pref. Shs. of £1 ea. (Pref. divd. £1440 p.a.)	£25,000 6% Non Cum. Pref. Shs. of £1 ea. (Pref. divd. £1500 p.a.)
<u>2,000</u> Ord. Shs. of £1 ea.	<u>5,000</u> Ord. Shs. of £1 ea.
<u>£20,000</u> (as in Case 5)	<u>£30,000</u> (as in Case 6)

In each case the Preference dividend is not expected to be met out of future profits in years 1 to 6 (Case 7) and in years 1 to 7 (Case 8) but thereafter the full annual Preference dividend is likely to be paid.

<u>Case 7</u>			<u>Case 8</u>			
<u>Yrs. 1-4 (inclusive) Profits</u>	<u>Yrs. 5 & 6 Profits</u>	<u>Yr. 7 & onwards Profits over</u>	<u>Yrs. 1-4 (inclusive) Profits</u>	<u>Yrs. 5 & 6 Profits</u>	<u>Yr. 7 Profits</u>	<u>Yr. 8 & onwards Profits over</u>
£1000 p.a.	£1275 p.a.	£1440 pa.	£1000 pa.	£1275 pa.	£1475 pa.	£1500 p.a.
5½% p.a.	7% p.a.	8% p.a.	4% p.a.	5% p.a.	5¼% p.a.	6% p.a.

Note: /

Note: It might be thought that it is both imprudent and speculative to take into account possible Preference dividends so far ahead of the valuation date. It is pointed out, however, that in doing so, one is simply following the views expressed in fixing the value of S. Ltd. at £18,000 (See badwill valn. £3000, Case 4 page 12). The value of S. Ltd. £18,000 is given in Cases 7 & 8 as one of the facts of the case.

	<u>Case 7</u>	<u>Case 8</u>
Rate of divd. adopted as the average rate paid considering the rates expected to be paid in the future	say 7% (average rate paid for next 8 yrs.)	say 5% (average rate paid for next 8 yrs.)
Value of Pref. Sh. per formula	$\text{£}1 \times \frac{7}{7\frac{1}{4}} = 19/3\frac{1}{2}$ say 19/3	$\text{£}1 \times \frac{5}{7\frac{1}{4}} = 13/9\frac{1}{2}$ say 13/9
Value of Pref. Capital	18,000 Pref. Shs. at 19/3 ea. $\text{£}17,325$	25,000 Pref. Shs. at 13/9 ea. $\text{£}17,187: 10/-$
Value of Ord. Capital (balance)	2,000 Ord. Shs. (equiv. to a value of 6/9 ea.) <u>675</u>	5,000 Ord. Shs. (equiv. to a value of 3/3 ea.) <u>812: 10/-</u>
Total value of S. Ltd. as above	<u><u>£18,000</u></u>	<u><u>£18,000 -</u></u>

The fair rate of return for the entire business $7\frac{1}{2}\%$ has not been taken in the above cases since the Preference dividend is likely to be met in full in 6 or 7 yrs. after purchase. A buyer of Preference Shares will expect therefore a return just slightly below (say $7\frac{1}{4}\%$) the fair return for the entire business. The Preference Shares in Case 7 are more valuable than those in Case 8 as the capital cover is more secure and the rate of Preference dividend greater (8% as against 6%).

If the above Preference Shares were cumulative, the shares would be more valuable since the arrears of Preference dividend in the first few years following the purchase, would be made good out of the increased profits expected thereafter. In the computation the fair rate of return expected ($7\frac{1}{4}\%$ in the above) would be slightly decreased /

decreased owing to the cumulative feature and the result would be that a Cumulative Preference Share would have a higher value, thus:-

	<u>Case 7</u>		<u>Case 8</u>	
Value of Cum. Pref. Sh. per formula	$\frac{£7}{7} = 20/-$ (par)		$\frac{£5}{7} = 14/3$	
Value of Cum. Pref. Cap.	18,000 shs. at par	£18,000	25,000 shs. at 14/3	£17812:10/-
Value of Cum. Ord. Cap.	2,000 " nominal value say 2/-	-	5,000 " nominal value say 1/-	187:10/-
		<hr style="width: 100px; margin: 0 auto;"/>		<hr style="width: 100px; margin: 0 auto;"/>
		£18,000		£18,000

Share valuations in general:

All the examples in this chapter are given in an attempt to demonstrate the accounting principles involved in a valuation of shares. Emphasis must be laid on the fact, however, that the value placed upon a share in any given circumstances, is largely a matter of personal opinion depending on the practical experience, vision and ability of the valuer. Such characteristics play a greater part in share valuation than theoretical accounting. In every case of valuation, the price arrived at by a mathematical calculation should be reviewed in order to satisfy oneself that the theory applied, and the mass of figures, have not produced a result divergent from the practical situation. In the review, one should try and forget the detail, and consider whether the price is fair, reasonable and sensible in the general circumstances of the case.

CHAPTER III. The Fully-owned Subsidiary.

The complexity involved in the preparation of a Consolidated Statement of Assets and Liabilities depends on the size and composition of the combine and on the attributes of the members' Balance Sheets. In the consideration of the simplest group - a Holding company with one fully-owned subsidiary - methods will be introduced which at first sight may appear abstruse but which will be found to be flexible and suitable for all types of groups. The consolidation procedure recommended and universally used in this treatise is:

(a) Each member's Balance Sheet, however, framed, is adjusted as far as possible, put in standardised form, and balanced.

(b) An aggregation of the adjusted Balance Sheet of the group is made.

(c) The Consolidated Statement is prepared from the aggregation.

While the advantages of this method over the conventional methods of approach may not be fully appreciated until consolidations of the larger and more complicated groups are attempted, the simple group is the obvious choice for the purpose of demonstrating general principles. As the various Adjustments required are discussed, simple theoretical examples of Consolidated Statements will be given where necessary, in order to focus attention on a particular point only, while general examples embracing all or many of the features which are likely to be met with in practice, will be presented at suitable intervals.

The connecting link between two companies in a simple group is the Investment appearing as an Asset of one of the members and the amount of share capital which that Investment represents and which appears as a liability of the other member. Where shares are purchased at par, these two figures will agree. With a purchase at any other price, the difference between par and that price, is examined, accounted for, and dealt with in the Consolidated Statement according to the various factors responsible for the difference. The "breaking up" of the Purchase Price (which was considered /

considered in Chapter II) discloses these factors.

Preliminary adjustments including Inter-company Indebtedness.

A necessary preliminary to the process of consolidation is to examine the composition of the various headings in each Balance Sheet and make the required adjustments so that all Balance Sheets to be consolidated are restated on a uniform basis. For example if Income Tax is shown under "Accrued Charges" in one Balance Sheet and under "Reserve for Income Tax" in another, or if stock of advertising material is included in "Stock" by one member and under "Deferred Charges" by another one of the Balance Sheets must be adjusted, so that the same headings in each Balance Sheet contain precisely the same items. Thus, like will be added to like to give true aggregation figures in the Consolidated Statement.

Where a holding company lends money to, or is a creditor of, a subsidiary (or vice versa) then on any date the asset of one company will equal the liability of the other, and from the point of view of the group, the indebtedness is purely internal and therefore cancels out in the Consolidated Statement. In the preliminary examination of the legal Balance Sheets for heterogeneous headings, etc., inter-company indebtedness should be reconciled and shown under a separate heading in the adjusted Balance Sheet. In accordance with the Companies Act 1947, inter-group indebtedness must be shown separately in the "legal" Balance Sheets of the Holding Company and of the Subsidiaries. The case may arise however in large groups where a company, which is not a Subsidiary as defined in the Act, is to be included in the Consolidated Balance Sheet and the inter-company indebtedness may perhaps be found to be included under debtors, creditors, bills receivable or payable, or loans in the Balance Sheets.

I. Preliminary adjustments including Inter-company indebtedness.

The Balance Sheets of a group as at 31st December 1946 are:

<u>Liabilities</u>	<u>H.</u>	<u>S.</u>	<u>Assets</u>	<u>H.</u>	<u>S.</u>
Share Cap. (in £1 Ordinary shares)	£100,000	£20,000	Property at cost..	£20,000	
Loans	1,000		Plant at cost less depreciation ..	23,000	£ 4,000
Loan from subsidiary and accrued interest thereon	4,100		Furniture & Fittings at cost less depreciation ..	800	400
Loan to H. Ltd.		1,000	Stock	35,300	8,900
Provision & Accrued Charges.	19,000	4,500	Loan to H. Ltd. ..		4,000
Provision		500	Loans		2,000
General Reserve	3,000		Sundry Debtors ..	27,000	8,000
Profit and Loss Account.	6,000	2,000	Deferred Charges..	500	600
			Cash in Bank ..	5,500	100
			<u>Investment in Sub.</u>		
			at Cost.		
			20,000 Ord. Shs.		
			in S	20,000	
			Current A/c with Sub.	1,000	
	<u>£133,100</u>	<u>£28,000</u>		<u>£133,100</u>	<u>£28,000</u>

Notes: /

Notes:

III (4)

- (1) H's Creditors include £2,000 in respect of national taxation outstanding.
- (2) As regards the loan of £4,000 due by H. to S, interest receivable £100 has not been accrued in S's accounts.
- (3) "Deferred Charges S £600" include £200 stock of advertising material. Such stock is included under "Stock" in H's Balance Sheet.
- (4) H. acquired all the share capital of S. on S's incorporation.

Solution (a) The adjustments required in each company's accounts set out in the form of journal entries are:

H. (1) Sundry Creditors Dr. £2,000
To Provision for National Taxation £2,000

(Being transfer to separate heading of National Taxation)

S. (3) Loan due by H. Dr. £ 100
To Profit and Loss Account £ 100

(Being accrued interest receivable due at 31st Dec. 1946 now provided for).

S. (4) Stock A/c Dr. £ 200
To Deferred Charges £ 200

(Being transfer of advertising material to Stock).

(b) The aggregation of the adjusted Balance Sheets is:

Liabilities	Total	H.	S.	Assets	Total	H.	S.
Share Capital.	£120,000	£100,000	£20,000	Property	£20,000	£20,000	-
Loans from Outsiders ..	1,000	1,000		Plant	27,000	23,000	£ 4,000
Loans from Sub. and interest thereon ..	-	4,100		Furniture etc... ..	1,200	800	400
Charges ..	21,500	17,000	4,500	Stock	44,400	35,300	9,100
Amount due to H.			1,000	Loans to outsiders ..	2,000		2,000
Taxation Provision	2,500	2,000	500	Loan to Hand interest thereon.. .. .	-		4,100
General Reserve	3,000	3,000		Sundry Debtors.. ..	35,000	27,000	8,000
Profit & Loss A/c	8,100	6,000	2,100	Deferred Charges ..	900	500	400
	£156,100	£133,100	£23,000	Cash.. .. .	5,600	5,500	100
				Investment in Sub. ..	20,000	20,000	
				Current A/c with Sub.	-	1,000	
					£156,100	£133,100	£23,000

(c)/

Inter-company bills are treated in the same way as debts, the Bills Receivable in one company being "contra-ed" against the Bills Payable in the other. If, however, all or any such bills are discounted (in which case they will be noted as a Contingent Liability in /

(c) The Consolidated Statements of Assets & Liabilities is:

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H. (Nominal & Issued)		Property At Cost	£20,000
100,000 Ord. Shs. of £1 ea. fully paid	£100,000	Plant at cost less depn.	27,000
Loans	1,000	Furn. & Fit. at cost less depn.	1,200
Sundry Crs. & Accrued Charges	21,500	Stock	44,400
Provision for National Taxation	2,500	Loans	2,000
General Reserve	3,000	Sundry Debtors	35,000
<u>Profit & Loss Account</u>		Deferred Charges	900
Balance at credit at date	8,100	Cash in Bank	5,600
		<u>Cost of Control of S. to H.</u>	
		Cost	£20,000
		Par value	<u>20,000</u>
	<u>£ 136,100</u>		<u>£ 136,100</u>

Notes thereon:

- (1) In Consolidated Statements only amounts due to outsiders are shown as Debtors, Creditors, Loans, etc.
- (2) H. can regard the whole of S's. balance on Profit & Loss Account as revenue as the shares have been held since S's. incorporation.
- (3) The "legal" Balance Sheet of a Holding Company, but not that of a Subsidiary must state indebtedness to or by a Subsidiary, separately under the provisions of Sec. 125 of Companies Act 1929. The new Companies Act 1947 makes it obligatory for the Subsidiary also to disclose inter-group indebtedness. (Sch. II Part II Clause 2 (1))
- (4) The example demonstrates the adjustments required when the Balance Sheets of the members are not prepared on a uniform basis. It is always desirable that a Holding Company should lay down rules to all members so that the same items are shown under the same headings of the Accounts and Balance Sheets of all the members of a group.

Inter-company bills are treated in the same way as debts, the Bills Receivable in one company being "contra-ed" against the Bills Payable in the other. If, however, all or any such bills are discounted (in which case they will be noted as a Contingent Liability in /

in the legal Balance Sheet) there will be no contra for these bills and they will appear as a liability in the Consolidated Statement. They are in fact an actual liability of the group.

Inter-company indebtedness may not agree in the two Balance Sheets due to goods or cash in transit at the date of the balance. The difference is treated in the same way as for Branch Accounts, i.e. an item appears in the Consolidated Statement for "Cash (or Goods) in Transit" which represents the difference.

Pre-acquisition Revenue Balances.

Unlike an ordinary investment, an investment in a subsidiary company gives the holding company control of the distribution of the profits of the subsidiary and makes the subsidiary, although a separate legal entity, almost part and parcel of the holding company as if there had been a complete merging of the businesses into one unit. It is from this aspect that one prepares a Consolidated Statement to show the financial position of a group of companies.

If the holding company buys shares in the subsidiary on the date the latter is incorporated, all profits earned by both companies are revenue to the group. On the other hand, where control of a company already trading, is acquired, the shares being purchased usually above or below par, all profits earned by the subsidiary up to the acquisition date whether at credit or Profit and Loss Account or at credit of a General Reserve of the subsidiary, are not revenue to the group, but are paid for theoretically in the price given for the shares. In the Consolidated Statement these pre-acquisition revenue balances are capitalised and set off against the purchase consideration of the shares. The extent of the adjustment to be made depends on how these pre-acquisition revenue balances have been dealt with up to date in the holding company's financial books where there are three alternatives.

(1) They may be fully capitalised already in the books of the Holding /

Holding Company where the first dividends received from the subsidiary, have been credited to Investment Account and do cover exactly (or more than cover) the pre-acquisition revenue balances in point of fact. The writing down of the value of Investments in this way in the holding company's financial books is recommended, but it is not always a practical proposition.

(2) They may not have been dealt with by the holding company, e.g. where no dividends have been received up to the date of the Consolidated Statement or where dividends received, being declared for a period after date of acquisition and from profits earned since acquisition, have been credited to Profit and Loss Account of the holding company.

(3) They may have been dealt with partially by the holding company where Investment Account has been credited with dividends which, however, are insufficient to cover the full pre-acquisition revenue balances.

In all cases the figures must be adjusted in the Consolidated Statement so that the full pre-acquisition revenue balances of a Subsidiary are capitalised no matter how they have been dealt with in the financial books. Any dividends credited by the holding company to Investment Account affect the adjustment to be made when one is consolidating accounts; such dividends reduce (Case 3 above) or eliminate (Case 1 above) the pre-acquisition revenue balance which otherwise would be capitalised in full by adjustment. In all Consolidated Statements, the balances actually shown at credit of Revenue Accounts (Profit and Loss Account and General Reserve) represent true revenue to the group, i.e. the total revenue of the holding company available for distribution, together with the revenue of the subsidiary but only the latter's undistributed earnings since the acquisition date. The balance at credit of Revenue Account at the acquisition date forms the yard stick to determine the amount of the subsidiary's profits which cannot be regarded as revenue of the group. Profit made by a subsidiary prior to the date /

date on which its shares were purchased by the holding company are kept separate from profits earned thereafter. The former are part of the purchase price of the shares and are capitalised, the latter only are revenue to the group. This principle holds good whether the matter is being considered from the point of view of the Consolidated Statement preparation, or from that of the treatment in the financial accounts of the holding company of dividends received from a subsidiary.

Ex. 2. Pre-acquisition Revenue Balances. Dividends credited to Investment Account.

The summarised Balance Sheet of S. as at 31st December 1945 is:

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. (in £1 Ord. Shs.)	£20,000	Sundry Assets	£30,000
Creditors	4,000		
General Reserve	1,000		
Profit & Loss Account . .	<u>5,000</u>		
	£30,000		<u>£30,000</u>

If £30,000 represents the true value of the assets, the value of the business is £26,000 (£30,000 less creditors £4,000) and S's. Ordinary Shares are worth 26/- each. Let it be assumed that H. purchased all S's. Ordinary Shares at that price and H's. Balance Sheet on the purchase date, 31st December 1945, is -

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. (in £1 Ord. Shs.)	£100,000	Sundry Assets	£104,000
Creditors	10,000	Invest. in Subsidiary	
Profit & Loss Account . .	<u>20,000</u>	20,000 Ord. Shs. of S.	
	£130,000	at cost	<u>26,000</u>
			<u>£130,000</u>

The consolidated statement as at 31st December 1945 is -

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H	£100,000	Sundry Assets (£104,000	
Creditors (£10,000 + £4000	14,000	+ £30,000)	£134,000
General Reserve - S . .	<u>£1000</u>	<u>Net cost of Control of</u>	
(falling to H. and capd.		<u>Subsidiary S.</u>	
pre-acqn.)		Cost to H.	£26,000
Profit & Loss Account S.	<u>£5000</u>	Less: <u>Pre-acqn.</u>	
(falling to H. and capd.		<u>Rev. Bals.</u>	
pre-acqn.)		Gen. Res. £1000	
H.	20,000	P. & L.A/c 5000	<u>6,000</u>
		Par value	£20,000
			<u>20,000</u>
	<u>£134,000</u>		<u>£134,000</u>

If /

If S. thereafter declared a dividend of £6,000 (30% free of tax) for the year ended 31st December 1945 and so distributed all its available revenue (Profit and Loss Account £5000 plus General Reserve £1000) H. would credit that dividend to Investment Account, and the book value of the shares in S. would be written down to £20,000. In all subsequent Consolidated Statements, no adjustment would be required for S's. pre-acquisition revenue balances, as these have been fully capitalised in the financial books of H.

Let it be assumed, however, that S. adopted the more conservative and practical course of declaring a dividend of £4,000 (20% free of tax) for the year ended 31st December 1945 and the Balance Sheets at 31st December 1946 were -

	<u>Liabilities</u>		<u>Assets</u>	
	H.	S.	H.	S.
Sh. Cap. (in £1				
Ord. Shs.	£100,000	£20,000	Sundry Assets . . .	£105,000 £32,500
Creditors	12,000	5,000	Invest. in Sub.	
Gen. Res.		1,000	20,000 Shs. in S.	
Profit & Loss A/c	15,000	6,500	at cost £26,000	
			Less: Divd.	
			cred. 4,000	22,000
	<u>£127,000</u>	<u>£32,500</u>		<u>£127,000</u> <u>£32,500</u>

The Consolidated Statement at 31st December 1946 (a year later) would be -

	<u>Liabilities</u>		<u>Assets</u>	
	H.	S.	H.	S.
Sh. Cap. - H.	£100,000		Sundry Assets	£137,500
Creditors		17,000	Net cost of control of S.	
Gen. Res. - S.	<u>£1,000</u>		Book value	£22,000
(falling to H. and capd. pre-acqn).			Less: Bal. of pre-acqn. bals.	
Profit & Loss A/c			Gen. Res. £1,000	
S.	£6,500		P. & L.A/c <u>1,000</u>	<u>2,000</u>
H.	<u>15,000</u>		Par	<u>£20,000</u>
	<u>£21,500</u>			<u>20,000</u>
Less: Capd. by H. as pre-acqn. bal				
Less: Divd. already cr. in books	<u>4,000</u>	<u>1,000</u>		
		<u>20,500</u>		
		<u>£137,500</u>		<u>£137,500</u>

Notes:

- The balance at credit or Profit and Loss Account £20,500 represents -
 - Total revenue of the Holding Company available for distribution £15,000
 - The undistributed earnings of the subsidiary since acquisition date 5,500
(The dividend declared by S. was in respect of pre-acquisition earnings).
- Although S. has a General Reserve of £1,000 at 31st December 1946, no reserve appears in the consolidation.
This / £20,500

This is a Subsidiary's Reserve created before acquisition, which is included in the purchase price of the shares and falls to be capitalised by the group.

A pre-acquisition debit balance on Profit and Loss Account is dealt with on the same principles. For example, let it be assumed that S's. Balance Sheet at 31st December 1945 is -

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. (in £1 Ord. Shs)	£20,000	Sundry Assets	£25,000
Creditors	10,000	Profit & Loss A/c	5,000
	<u>£30,000</u>		<u>£30,000</u>

S's. equity is worth £15,000 if the Balance Sheet Assets represent fair values. If H. bought all the shares in S. for £15,000, H's. Balance Sheet would show as an Asset.

Investment in Subsidiary at cost (20,000 Shares in S.) £15,000

In the Consolidated Statement at 31st December 1945, in place of this debit of £15,000 there would appear the following, relative to S.

<u>Liabilities</u>		<u>Assets</u>	
Creditors - S.	£10,000	Sundry Assets - S.	£25,000
		Net cost of Control of S.	
		Cost to H.	£15,000
		Add: pre-acqn. debit bal. of S.	5,000
			£20,000
		Par	<u>20,000</u>

The general rule is, therefore, that in the comparison of the cost of shares in a subsidiary with their par value, the pre-acquisition revenue balance of the subsidiary is deducted from the cost if it is a credit balance (a pre-acquisition profit), but is added to cost if it is a debit balance (a pre-acquisition loss). The reason is that a purchaser of the shares is buying the net assets of the subsidiary and the value of the net assets will be greater or less than the par value of the Share Capital according to the balance on the Revenue Accounts (Profit and Loss Account and General Reserve).

The / 000 Ord. Shs. of £1 ea. in S. Ltd. (at cost) £25,000

<u>Less: Divds. credited</u>		
1939 divd. recd. from S. in 1940	22,000	
1940 " (Propn.) " " " 1941	2,500	
		<u>£23,500</u>

The pre-acquisition revenue balances (Dr. & Cr.) of a subsidiary must be capitalised in a Consolidated Statement irrespective of the current balances on Profit & Loss Accounts and General Reserve of the subsidiary. For example, where the current credit balance on Profit and Loss Account is less than the pre-acquisition credit balance of a subsidiary either -

- (1) The subsidiary has incurred a net loss since acquisition and this net loss must accordingly be charged to the Profit & Loss Account of the Consolidated Statement of the group, or -
- (2) The subsidiary has distributed dividends in excess of profits earned since acquisition. In so far as these dividends are paid out of the pre-acquisition balance, they should have been credited to Investment Account by the holding company and not treated as revenue. But results over a number of years may be such that dividends paid out of post-acquisition profits exceed the net profit earned by the subsidiary since acquisition. These dividends may be quite legitimately credited to the Profit and Loss Accounts of the holding company and in such a case the excess must be adjusted in the preparation of the Consolidated Statement, so that only the net profit of the subsidiary since acquisition date is credited to the Profit and Loss Account of the group. This adjustment is automatically done by the capitalisation of the full pre-acquisition balance of a subsidiary. This will be clear from an example.

Ex. S. is a fully owned subsidiary, purchased by H. on 31st Dec. 1939, when S. had a credit balance on Profit & Loss Account of £4,000. At 31st Dec. 1943 when a Consolidated Statement of H. and S. was being prepared, the balances at credit of Profit & Loss Account were H. £6,000 S. £1,000.

Invest. A/c in H's. books was as follows:

20,000 Ord. Shs. of £1 ea. in S. Ltd. (at cost) £26,000

Less: Divds. credited

1939 divd. recd. from S. in 1940	£2,000	
1940 " (Propn.) " " " 1941	500	<u>2,500</u>

A /

as per 1943 B/S of H. £23,500

A summary of S's. Profit and Loss Account was as follows:-

Balance at credit at 31/12/39	£4,000
<u>Less:</u> Divd. paid for year 1939	<u>2,000</u>
	£2,000
Profit for year to 31/12/40	<u>3,000</u>
	£5,000
<u>Less:</u> Divd. paid for year 1940	<u>3,500</u>
	£1,500
Profit for year to 31/12/41	<u>1,800</u>
	£3,300
<u>Less:</u> Divd. paid for year 1941	<u>1,700</u>
	£1,600
<u>Less:</u> Loss for year to 31/12/42	<u>1,000</u>
	£ 600
Profit for year to 31/12/43	<u>400</u>
Cr. Bal. at 31/12/43	<u>£1,000</u>

S's. results may be summarised thus:

	Post-acquisition		Divds. paid by S. and recd. by H. - Treat. in H's. financial books		
	Profits	Losses	Total	of which	
				cr. to H's. P. & L. A/c	cr. to Invest. A/c
1939			£2,000		£2,000 declared for pre-acqn. period
1940	£3,000		3,500	£3,000	500 (declared for post-acqn. period
1941	1,800		1,700	1,700	(but paid out of pre-acqn. bal. to the extent of £500
1942		£1,000			
1943	<u>400</u>				
	<u>(£5,200</u>	<u>£1,000)</u>	<u>£7,200</u>	<u>£4,700</u>	<u>£2,500</u>

Net Profit for 4 yrs. £4,200

S's. position from the group's view-point is:

Amount of post-acqn. profits which can be legitimately credited to group revenue	£4,200
S's. divds. recd. by H and credited to revenue	<u>4,700</u>
Excess of dividends recd. and credited to revenue over profits earned, since acquisition	<u>£ 500</u>

This excess is automatically corrected by the capitalisation of S's. /

S's. pre-acquisition balance in the Consolidated Statement thus:-

Profit and Loss Account	H.	£6,000	
	S.	<u>1,000</u>	
			£7,000
<u>Less:</u> Capd. by H. - pre-acqn. bal. of S.		£4,000	
<u>Less:</u> Divds. already cr. to Investment			
A/c in H's. books		<u>2,500</u>	<u>1,500</u> £5,500

The above cr. bal., £5,500 is £500 less than H's. P. & L. A/c bal. (£6,000).

The revenue position in a Consolidated Statement is unaltered no matter how H. in its financial books, has treated the dividend received from S. Suppose that of the £3,500 dividend received for 1940, H. by adopting the more prudent course, had taken £2,000 to the credit of Investment Account and so had written down the value of Investment in S. by the full pre-acquisition balance £4,000 (£2,000, 1939; £2,000 1940 dividend). H's. Profit and Loss Account at 31/12/43 would then be only £4,500 as £1500, instead of £3000, would have been credited in 1941.

Investment Account in H's. books would have read:

20,000 Ordinary Shares of £1 each in S. Ltd. cost 31/12/39	£26,000
<u>Less:</u> dividends received and credited	
1939 dividend received	£2,000
1940 " " " " 1941	<u>2,000</u> <u>4,000</u>
Balance per H's. Balance Sheet at 31/12/43	£22,000
(cost less divds. covering the full pre-acqn. bal.)	

In these circumstances the Profit and Loss Account in the Consolidated Statement would be as follows:-

Profit and Loss Account	H.	£4,500
	S.	<u>1,000</u>
		£5,500
<u>Less:</u> Now capd. by H. - pre-acqn. bal. of S.		£4,000
<u>Less:</u> Divds. already cr. to Investment Account		
in H's. books		<u>4,000</u> <u>Nil</u>
		<u>£5,500</u>

In /

In practice it is unnecessary to examine the subsidiary's result in detail. All that ~~is~~ required to be done is to capitalise the full pre-acquisition revenue balance of the Subsidiary in the Consolidated Statement. The amount of the adjustment to be made depends on the extent to which it is already capitalised in the financial books of the holding company by the crediting of dividends received to Investment Account.

A general and desirable feature of all Consolidated Statements is that the General Revenue Account should be kept in line with the divisible profits as shown in ^{of the members of the group.} members' financial Accounts. Where shares in the subsidiary are stated in the holding company's Balance Sheet at cost, it is inevitable that there will be a divergence between these two revenue figures owing to the capitalisation of the pre-acquisition revenue balance of the subsidiary. This divergence will continue to exist until such time as the subsidiary distributes as dividends the fund of profits existing at acquisition date. These dividends when received by the holding company should not be credited to the holding company's Profit and Loss Account but used to write down the value of Investment in subsidiary. The divergence then will disappear.

The Pre-acquisition Revenue Balance estimated.

The pre-acquisition revenue balance of a Subsidiary, which must not be regarded as revenue by the member ^{of the group} which acquired the shares, may be definite or require to be estimated, according to the circumstances of the case. If the date of the purchase of the shares chances to coincide with the date of a Balance Sheet of the subsidiary, the pre-acquisition revenue balances are definitely known and are the balances at credit or debit of Profit and Loss Account and at credit of General Reserve as shown by that Balance Sheet. With a purchase on any other date, an estimate must be made by an adequate examination of the subsidiary's books and accounts. For example, the estimated balance on Profit and Loss Account might be computed from the amount according to the last /

last Balance Sheet and adjusted for -

- (a) Any dividends declared and paid since the Balance Sheet date.
- (b) " transfers to or from General Reserve since the Balance Sheet date.
- (c) An estimate of the trading results (after all charges including National Taxation, Directors' Fees, etc., have been debited) covering the period from the last Balance Sheet to acquisition date. This estimate may be made on a time, turnover, or other suitable basis - the same principles apply as those used in the calculation of Prior to Incorporation Profits which are capitalised by a newly-formed Limited Company which has taken over a going concern.

The balance at credit of General Reserve can be obtained at any particular date from the Ledger Account.

Ex. 3

Estimated pre-acquisition revenue balance

The summarised Balance Sheets of a group at 31st Dec. 1946 were:-

<u>Liabilities</u>	<u>H.</u>	<u>S.</u>		<u>H.</u>	<u>S.</u>
Sh. Cap. (in £1 Ord. Shs.)	£100,000	£20,000	Sundry Assets	£104,000	£30,000
Creditors	10,000	8,000	Invest. in Sub.		
General Reserve	9,000	3,500	20,000 Shs. in S. at cost	26,000	
Profit & Loss A/c	<u>13,000</u>	<u>3,000</u>	Goodwill at cost	<u>2,000</u>	<u>4,500</u>
	<u>£132,000</u>	<u>£34,500</u>		<u>£132,000</u>	<u>£34,500</u>

Notes:

- (1) H. acquired all the shares in S. on 30th April 1936 when S. had a general reserve of £2,000.
- (2) No Balance Sheet was made up on the purchase date. S's. Balance Sheet as at 31st December 1935 showed that S. had a credit balance in Profit and Loss Account of £2,500. S. declared a dividend of £1,500 7½% (F.O.T.) on 2nd Feb. 1936 and it was estimated that the net profit of S. from 31st Dec. 1935 to 30th April 1936 was £3,000.

Solution: The pre-acquisition balance on S's. Profit and Loss A/c at 30/4/36 is estimated thus:

Balance at credit at 31/12/35 per Balance Sheet	£2,500
<u>Less:</u> Dividend declared 2/2/36	1,500
<u>Add:</u> Estimated Profit from 31/12/35 to 30/4/36	£1,000
	<u>3,000</u>
The / Estimated credit balance on 30/4/36	<u>£4,000</u>

The Consolidated Statement as at 31st December 1946 is:-

<u>Liabilities</u>		<u>Assets</u>	
Share Capital H.	£100,000	Sundry Assets	£134,000
Creditors	18,000	Goodwill per B/Ss.	6,500
General Reserve - S.	£3,500	<u>Net Cost of Control</u>	
	H. <u>9,000</u>	<u>of S.</u>	
	£12,500	Cost	£26,000
<u>Less: Capd. by H.</u>		<u>Less: pre-</u>	
(pre-acqn.)	<u>2,000</u>	acqn. bals.	
	10,500	Gen. Res. £2,000	
Profit & Loss A/c		P. & L. A/c <u>4,000</u>	6,000
	S. £3,000		20,000
	H. <u>13,000</u>	Par	<u>20,000</u>
	£16,000		£ - - -
<u>Less: Capd. by H.</u>			
(pre-acqn.)	<u>4,000</u>		
	12,000		
	£ 140,500		£ 140,500

- Notes (1) H. has given the "Balance Sheet" price for S. £26,000 (Cap. £20,000, Reserves and Profit & Loss Account £6,000)
- (2) The amount capitalised by H. in respect of S's. P. & L. A/c £4,000 exceeds S's. current balance on Profit & Loss A/c. This is immaterial. Such a position is explained by -
- (a) A net trading loss since acquisition.
 - (b) An excess of dividends paid over profits earned since acquisition (the Holding Company receives its share of the dividends).
 - (c) Transfers to General Reserve. (S's. reserve has increased from £2,000 in 1936 to £3,500 in 1946 in the above example).

As the shares stand "at cost" in H's. B/S, H. has credited to Rev. A/c all dividends declared by S, and H. regards S's. pre-acqn. rev. bal. £6,000 (Gen. Res. £2,000 and P. & L. A/c £4,000) as still lying undistributed in S's. B/S, at 31st Dec. 1946 (Gen. Res. £3,500 and P. & L. A/c £3,000, together £6,500).

The Slumping of Profit & Loss Account and General Reserve prior to Consolidation.

The General Reserve of a subsidiary at the date the shares are acquired by the holding company may be reduced in a subsequent

Balance /

Balance Sheet for the following reasons. There may have been -

- (a) An issue of bonus shares out of or partly out of that General Reserve.
- (b) A writing down of Assets from the General Reserve.
- (c) A transfer to the credit of Profit and Loss Account from the General Reserve.

A bonus issue of shares (case (a)) reduces the pre-acquisition balance on General Reserve to be capitalised during the preparation of a subsequent Consolidated Statement, as the holding company benefits as a shareholder in the bonus. The increase in the par value of the holding, as a result of the bonus, exactly offsets the reduction made. The General Reserve has been capitalised in fact by the subsidiary in its financial books.

Ex. S. Ltd. is a subsidiary with an Ordinary Share Capital of £20,000 in £1 shares, purchased outright by H. Ltd., when the credit balance on S's. General Reserve is £13,000. Thereafter out of its General Reserve S. declares a bonus issue of one Ordinary Share for every two held, and so reduces the General Reserve to £3,000 in its financial books and increases its issued capital to £30,000.

In the Consolidated Statement before the bonus £13,000 would be capitalised as the pre-acquisition balance on General Reserve, thus:-

Cost of Shares to H.		£ x
<u>Less:</u> Pre-acqn. rev. bal.	£13,000	
Par value	<u>20,000</u>	<u>£33,000</u>

After the bonus issue only £3,000 would be so capitalised but the par value of H's. holding in S. would have been increased from £20,000 to £30,000 i.e. by £10,000. The entry for the Consolidated Statement would be -

Cost of shares to H.		£ x
<u>Less:</u> Pre-acqn. rev. bal.	£3,000	
Par value	<u>30,000</u>	<u>£33,000</u>

In /

In all the Consolidated Statements prepared, the final figures for before, as well as for after, the bonus issue would be unaltered so far as this particular point is concerned.

The Bonus issue might be made or partly made out of the pre-acquisition balance on Profit and Loss Account in which case the same principles would apply to that Account.

In cases (b) and (c) a debit balance on the post-acquisition General Reserve of the subsidiary would emerge when one is preparing the Consolidated Statement for the General Reserve at date would be less than that when the subsidiary was acquired. It is a matter of opinion as to whether this debit balance should be transferred to the post-acquisition Profit & Loss Account of that subsidiary or alternatively set off against a credit balance on General Reserve of the holding company (or another subsidiary). Accordingly, in the final Consolidated Statement the amounts appearing at credit of General Reserve (a debit balance is inadmissible) and at the debit or credit of Profit and Loss Account, are arbitrary. This point suggests that there is no real necessity to distinguish between Profit & Loss Account and General Reserve during the process of consolidating the figures of any group; both are undistributed profits from the group's view-point and can be dealt with more conveniently under the one heading "Revenue Account". Such an expedient is particularly advantageous for it facilitates the adjustment of the book value of Investments, which matter will be dealt with in the next section. After the draft Consolidated Statement is completed, the Revenue Account may be divided between General Reserve and Profit & Loss Account for the final Consolidated Statement; the controllers of the group should determine the amount to be placed to General Reserve. As a minimum, it must cover normally the amount at credit of the General Reserve of the holding company. Anything over and above this figure seems quite optional and at the discretion of the controllers. To grant them this discretion is simply an admission of the power which they already have, of being in a position as controlling shareholders to switch amounts at any time between /

between General Reserve and Profit & Loss Account in the financial Accounts of a subsidiary. As regards the holding company the sanction of the shareholders is usually required for transfers to and from its General Reserve.

The adjustment of the holding company's Balance Sheet prior to consolidation, for the pre-acquisition revenue balances of the subsidiary.

For simplicity during the development and explanation of the capitalisation of the pre-acquisition revenue balances of a subsidiary, the fundamental aim of the general procedure, which is to adjust each member's Balance Sheet as far as possible and put it in standardised form, has been ignored in the last three examples. This point must now be considered.

Shares in a subsidiary may appear in the holding company's Balance Sheet "at cost" or "at cost less dividends credited" such dividends partially or wholly covering the pre-acquisition revenue balances, but there is no reason why the Balance Sheet of the company holding the shares (i.e. in the case of a simple group, the holding company) should not be adjusted itself immediately prior to consolidation so as to show the value of the shares in the subsidiary consistently "at cost adjusted for the full pre-acquisition revenue balances" (General Reserve and Profit & Loss Account) called "Adjusted Cost" for convenience in future examples.

This is carried out by an adjusting consolidation entry debiting the holding company's own Revenue Account (for pre-acquisition profits) and crediting Investment Account or vice versa in the case of pre-acquisition losses. Thereafter the group can regard the whole of the current credit or debit balance on the subsidiary's Revenue Account as all revenue which is advantageous particularly in large groups where shares in any one subsidiary may be held by several members and/or bought on different dates. With cross-holdings this method is invaluable as will be realised when these are considered in Chapter 9.

It will be appreciated that the ideal position^{is} to find ~~is~~ that the shares in a subsidiary have been written down in the holding company's financial books by the full amount of the pre-acquisition revenue balance, out of dividends received, for in such a case no further adjustment is required when one is preparing the Consolidated Statement and the total balance at credit of the subsidiary's Revenue Account as shown by the Balance Sheet is revenue to the group. The procedure proposed in this section for the preparation of Consolidated Statements comes to this, that where the compiler of a Consolidated Statement finds that this ideal state of affairs does not exist, he adjusts the holding company's accounts presented for consolidation to the ideal position and by doing so, the investment in subsidiaries will appear in standardised form, irrespective of the value of the shares in the legal Balance Sheet and these investments will be valued at "Adjusted Cost" in all cases in the adjusted Balance Sheets, which are aggregated.

Ex. 4. Adjustment of Investments to show a value at cost less pre-acquisition revenue balances.

Facts as in previous example.

Solution: (a) H's. Accounts require the following adjustment

H 1	Revenue Account	Dr. £6,000	
	To Investment A/c (in S.)		£6,000
	(Being pre-acquisition revenue balance of S. as at 30th April 1936 when H. acquired all the shares in S., made up thus:-		
	Balance at credit of General Reserve		£2,000
	" " " " Profit & Loss A/c estimated		4,000
			<u>£6,000</u>

After the above adjustment is made, the full balance at credit of S's. Revenue Accounts can be regarded as entirely Revenue by H.

(b) The /

(b) The Aggregation of adjusted Balance Sheets is -

	<u>Liabilities</u>			<u>Assets</u>			
	<u>Total</u>	<u>H.</u>	<u>S.</u>	<u>Total</u>	<u>H.</u>	<u>S.</u>	
Capital	£120,000	£100,000	£20,000	Sundry Assets	£134,000	£104,000	£30,000
Creditors	18,000	10,000	8,000	Goodwill per B/S	6,500	2,000	4,500
Rev. A/c (P. & L. A/c & Gen. Res.)	22,500	16,000	6,500	Invest. in S. (20,000 shs.) at Adjusted Cost	20,000	20,000	
	<u>£160,500</u>	<u>£126,000</u>	<u>£34,500</u>		<u>£160,500</u>	<u>£126,000</u>	<u>£34,500</u>

(c) The Consolidated Statement is -

<u>Liabilities</u>		<u>Assets</u>	
Share Capital H.	£100,000	Sundry Assets	£134,000
Creditors	18,000	Goodwill as per B/Ss.	6,500
Revenue A/c	22,500	<u>Net Cost of Control of S.</u>	
		Adjusted Cost to H.	£20,000
		Par	<u>20,000</u>
	<u>£140,500</u>		<u>£140,500</u>

The Revenue Account can now be split between Profit and Loss Account and General Reserve. The minimum transfer is £9,000 (H's. General Reserve) to General Reserve, but it may be increased to any amount at the discretion of the controllers. In making a theoretical mathematical calculation one must keep in view that a Revenue Account in a Consolidation is the Holding Company's undistributed balance together with the undistributed revenue of Subsidiaries since acquisition date.

General Reserve of the group H. + S. since acquisition
 £9,000 + (£3,500 - £2,000)
 £ 10,500

On this basis Revenue Account is therefore divisible

General Reserve	£10,500
Profit & Loss A/c	<u>12,000</u>
This /	<u>£22,500</u>

This mathematical division of Revenue Account gives the same figures for Profit & Loss Account and General Reserve as those in the previous example.

The journal entries in the preceding example and the journal entries in all the examples which follow, are not connected in any way with the financial books of any ~~member~~^{member}. They are "paper" entries put through to arrive at the Consolidated Statement from the existing Balance Sheet figures. In practice, the opening of a "Consolidation Journal" and a "Consolidation Ledger" which are used solely for the preparation of the annual Consolidated Statements of the group, will often be found to be more convenient than the use of a set of working papers. Many of the adjustments represented by the Journal Entries are a repetition each year. The ledger should be divided into sections representing members, and individual Accounts should be opened for each member's Assets and Liabilities in its own section. The adjusting journal entries are posted thereto from the Consolidation Journal. An Aggregation and Consolidation section, in which the adjusted figures of all the Accounts are collected and the Consolidated Statement is prepared, will also be required (See Appendix 2 for example of this form of Accounts).

Depreciation Adjustments and Revaluation of Fixed Assets.

In any Consolidated Statement it is obviously desirable that all assets of the same class should be depreciated at the same rate and an adjustment will be required where, on a particular asset, the rate of depreciation written off in the financial books of a member since it joined the group, differs from the rate adopted by the group. In the case of inadequate depreciation written off in the financial books, the adjustment for consolidation will be a debit to Revenue Account and a credit to the Asset Account when one is adjusting the Accounts of the defaulting member. At a later stage in the preparation of the Consolidated Statement, when the Group Revenue Account is being divided between Profit & Loss Account and /

and General Reserve, it is recommended that the depreciation adjustment should affect the Group General Reserve (if any) rather than the Group Profit & Loss Account since it is expedient that the latter should bear the closest relation possible to the actual divisible profits available for dividend paying by members of the group. In the Consolidated Statement a charge is being made to revenue each year, which charge is not appearing in the financial books of any member. If the depreciation is debited to Group Profit & Loss Account, the balance thereon as shown in the Consolidated Statement will become more and more at variance with the divisible profits as shown in the financial Accounts. For many years the former will always be less than the latter by the cumulative amount to date of the inadequate depreciation adjustment. Accordingly it is preferable to leave Group Profit & Loss Account unaffected and to charge the extra depreciation to Group General Reserve wherever one exists.

In the case of excessive depreciation written off in the financial Accounts the position is reversed; the Asset Account being debited and Revenue Account credited when one is adjusting the Accounts of the member concerned. This has the effect of inflating Group Revenue Account in the Consolidated Statement and the case here to avoid Group Profit & Loss Account being affected is even stronger. On principle one would hesitate to approve of any "paper" adjustment which would result in the balance on Group Profit & Loss Account being higher than the actual divisible profits of the members. Accordingly in the division of Revenue Account for the final Consolidated Statement, the amount representing the cumulative excessive depreciation written off in the financial books should be transferred to a Special Reserve Account headed "Special Reserve created from depreciation written off in the financial Accounts by a member, in excess of group requirements."

In the case of either inadequate or excessive depreciation, the position at the later date where the Asset is reduced to nil in either the financial books or the Consolidated Statement or both, is discussed in the last section of Chapter 4 (see pages IV.9 and seq.)

Revaluation of Fixed Assets. If it was considered by the holding company that the Assets of a subsidiary were under-valued at the date of acquisition of the subsidiary, adjustment is necessary to the existing Balance Sheet figures of the subsidiary at any consolidation date, unless these have been adjusted ~~for~~ in the financial books of the subsidiary. The aim of a consolidated statement is to arrive at properly valued figures for buildings, plant, etc., in place of simply an aggregation of figures often valued on different bases. Accordingly any definitely known under-valuation of a fixed asset in the legal Balance Sheet of a subsidiary should be adjusted prior to consolidation by the writing up of the asset concerned and the creating of a Capital Reserve Account representing the difference. After aggregation of the adjusted Balance Sheets the Capital Reserve (created and existing) is transferred to Net Cost of Control of the subsidiary and exactly offsets the theoretical increase in the purchase price of the shares due to this factor (see Chapter II). For over-valuations at the acquisition date, the same principles apply and although the adjustment may result in the creation of a Capital Reserve Account with a debit balance, the Capital Reserve Account is only created temporarily and is eventually transferred to net Cost of Control of the subsidiary.

Where an under or over-valuation of a fixed asset in the legal Balance Sheet of a subsidiary, is adjusted in the Consolidated Statement, the question of provision for depreciation on the valuation difference requires consideration. This will be deferred until a later stage of study, (see last section in Chapter IV, pages IV.16 and seq.)

Ex. 5 /

	<u>Book Value (15%).</u>	<u>Consolidated Statement (10%).</u>
Value at 31/12/43	£10,000	£10,000
Depreciation 1944	£1,500	£1,000
	£ 8,500	£ 9,000
Depreciation 1945	1,275	900
	<u>£ 7,225</u>	<u>£ 8,100</u>
	<u>£2,775</u>	<u>£1,900</u>
	£875	

(b) The Aggregation of the Adjusted Balance Sheets is:-

<u>Liabilities</u>			<u>Assets</u>				
	<u>Total</u>	<u>H.</u>	<u>S.</u>		<u>Total</u>	<u>H.</u>	<u>S.</u>
Capital	£120,000	£100,000	£20,000	Property	£63,200	£50,200	£13,000
creditors	15,200	11,200	4,000	Plant	28,100	20,000	8,100
rev. A/c	13,875	5,500	8,375	Invest. in S.			
cap. Res.	1,500		1,500	at adjusted cost	21,500	21,500	
				Goodwill	7,500	3,000	4,500
				Other Assets	30,275	22,000	8,275
	<u>£150,575</u>	<u>£116,700</u>	<u>£33,875</u>		<u>£150,575</u>	<u>£116,700</u>	<u>£33,875</u>

(c) The Consolidated Statement of Assets and Liabilities is:-

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. - H.	£100,000	Property	£63,200
Creditors	15,200	Plant	28,100
Revenue Account	13,875	Goodwill per Balance Sheets	7,500
Profit & Loss A/c	£13,000	Other Assets	30,275
Special Res. created from depn. written off in the fin. a/cs by a member, in excess of gr. requirements	<u>875</u>	<u>Net Cost of Control of S.</u>	
		Adjusted Cost	£21,500
		Less: Cap. Res. of S. falling to H.	<u>1,500</u>
			£20,000
		Par Value	<u>20,000</u>
	<u>£129,075</u>		<u>£129,075</u>

Notes: (1) Excessive depreciation, written off by a member but rectified for consolidation purposes, is not credited to Group Profit and Loss Account, but is shown as a special reserve in the Consolidated Statement. The Group Profit and Loss Account figure should always bear the closest relation possible to the Profit and Loss Accounts as shown in the financial accounts of the members.

(2) The /

(2) The Capital Reserve created by the revaluation of an asset is dealt with when one is preparing the Consolidated Statement from the Aggregation of the adjusted Balance Sheets. A Capital Reserve reduces the book value of the shares in the subsidiary in the same way as a pre-acquisition revenue credit balance, but the method of treatment is different. The reason for this different treatment will be clear when partly-owned subsidiaries are considered.

Net Cost of Control."Hidden" Goodwill.

To avoid confusion "hidden" Goodwill has not been introduced in the preceding examples but a theoretical price has been used for the shares acquired. It will have been observed that when the book value of the Investment in a subsidiary was adjusted for the pre-acquisition revenue balance and thereafter for any over or under-valuation of assets, the resultant figure has equalled the par value of the shares. In practice, however, the price of a share depends not only on these factors but also on the value of any Goodwill not appearing in the Balance Sheet of the subsidiary and on the relationship which exists between the buyer and seller of the shares. For example, a higher price will be given if "hidden" goodwill exists or if the buyers are particularly eager to purchase the subsidiary; a lower price may be acceptable where "Badwill" exists or where the prospective sellers are anxious to dispose of their shares. Further a share valuation is a matter of opinion. The buyers' valuation of the business will differ in many cases from that of the sellers and some compromise may be necessary if negotiations are to be concluded successfully. The "Net Cost of Control" of a member may be defined as the Goodwill or Capital Reserve arising during the process of consolidation as the direct result of the price paid for the shares of that member. It is computed from the cost price of the shares already adjusted for.

(1) The pre-acquisition revenue balances (profits (cr. bals.) deducted, losses (dr. bals.) added.

and (2) Any Capital Reserve existing in the subsidiary or created therein by a re-valuation of assets on the acquisition date (under-valuation of Assets gives a Capital Reserve (cr.) which is deducted; over-valuation gives a debit balance on Capital Reserve which is added).

The adjusted figure is put against the par value of the holding and the difference brings out the Net Cost of Control. If the adjusted figure is greater than par, the net debit balance represents a payment for Goodwill; if it is less than par, the net credit balance represents an allowance for "Badwill" and appears as a Capital Reserve in the Consolidated Statement.

In all draft Consolidated Statements the Goodwill appearing in the legal Balance Sheets should be treated like any other asset and should be stated separately from Goodwill arising from Net Cost of Control. The latter does not fall in every case to the group as will be seen when sub-subsidiaries are dealt with in Chapter VI. In the final Consolidated Statement the net Cost of Control may be applied if desired in the writing down or the writing up as the case may be, of the aggregation figure of the Goodwill as per Balance Sheets, provided that the book values of the other assets of the subsidiary were considered to be fair when control was acquired, or provided that such assets are adjusted to fair values in the Consolidated Statement. The exact position is sometimes unknown or obscure, in which case the Goodwill as per Balance Sheets should appear as such under one heading and the Net Cost of Control under another.

Ex. 6. Net Cost of Control - "Hidden" Goodwill.

Facts as in previous example except that H. paid £1,000 less for the shares in S. i.e. the book value of S's. shares in H's. Balance Sheet at 31st December 1945 is £20,500 and other Sundry Assets, £23,000.

Solution: (a) The adjustments required are the same as in the previous example.

(b) The Aggregation of the adjusted Balance Sheets is the same with the alteration of £1,000 in "Investment in Subsidiary" (now £20,500) Sundry Assets H. (previously £22,000, now £23,000).

(c) The Consolidated Statement is:-

Liabilities /

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H.	£100,000	Property	£63,200
Creditors	15,200	Plant	28,100
Revenue A/c	13,875	Goodwill per B/Ss.	7,500
Capital Res. -		Other Assets	31,275
Net Cost of Control		<u>Net Cost of Control of S.</u>	
of S.	1,000	Adjusted Cost £20,500	
		Less: Cap. Res.	
		of S. falling	
		to H.	<u>1,500</u>
			£19,000
		Par Value	<u>20,000</u>
		To Cap. Res. £1,000	
	<u>£130,075</u>		<u>£130,075</u>

Notes: (1) The "Hidden" Goodwill of S. is a minus quantity (£1,000) and is therefore "Badwill". In the above example all Assets have been adjusted to true values and so the Capital Reserve £1,000 arising from the Net Cost of Control can be set off against "Goodwill per B/Ss. £7,500 which will bring out a figure of £6,500 for Goodwill in the final Consolidated Statement. This should be stated as "Goodwill per B/Ss and undisclosed Goodwill of Subsidiary as reflected in the purchase price of the shares acquired."

(2) It should be observed that Consolidated Statements do not attempt to show the total value of Goodwill of members at any date, but only the Balance Sheet valuations of Goodwill of all members together with the value of any "hidden" Goodwill (or "Badwill" as in the above case) as at the date and to the extent the shares therein are held by the holding company.

Unrealised profit on Stock.

Inter-company trading is common particularly in a vertical combine as distinct from a horizontal one. A vertical combine is an amalgamation of companies, each interested in a process or processes of production ranging from the acquisition of the raw materials to the sale of the finished products. A horizontal combine is one built up by the combination of previous competitors in the same trade (e.g. a group of drapery stores) and inter-company trading in the latter type is likely to be restricted to transfers of surplus or slow-selling stock to a member who is in a better position to dispose of the goods to the public.

From the group's view-point, profit is realised only when the goods are sold to the outside public and, accordingly, stock held by one member which has been invoiced above cost from another member /

member must be written down to original cost, in the Consolidated Statement so as to exclude from the group profit a "paper" profit which may never be realised. The stock reserve should be created when one adjusts the accounts of the holding company prior to consolidation by a debit to Revenue Account and a Credit to Stock Reserve Account of the amount of the unrealised profit.

If a proper and adequate reserve for the whole group's unrealised profit on stock has been made already in the financial books of the holding company, no further adjustment requires to be made when one is consolidating accounts.

Issue of holding company's shares at a premium to purchase a subsidiary.

When a company's shares are valued above par, an economical method of acquiring a subsidiary is to offer the former company's shares at a premium to the existing shareholders of the latter company, the exchange rate depending on the relative market value of shares of each company. There must be available, of course, sufficient unissued capital in the holding company. The premium on the shares issued to acquire a subsidiary in this manner will appear usually as a "Capital Reserve" in the Balance Sheet of the holding company and may be considered a set off against the Net Cost of Control of the subsidiary in the Consolidated Statement.

Ex. 7. Issue of shares at a premium to acquire a subsidiary.

The summarised Balance Sheets of a group as at 31st Dec. 1946 were:-

	<u>Liabilities</u>			<u>Assets</u>	
	<u>H.</u>	<u>S.</u>		<u>H.</u>	<u>S.</u>
Sh. Cap. (in £1 Ord. Shs.)	£1,000,000	£20,000	Sundry Assets	£1,300,000	£28,000
New Cap. issued "	30,000		Invest. in S.		
Premium on Shares	6,000		20,000 shs.		
Creditors	200,000	5,000	at cost	36,000	
Revenue A/c ; ; ;	100,000	3,000			
	<u>£1,336,000</u>	<u>£28,000</u>		<u>£1,336,000</u>	<u>£28,000</u>

On 31st Dec. 1946 H. purchased all the shares in S. for £36,000 payable by an issue of 30,000 new £1 Ordinary Shares in H.
at /

at 24/- (premium 4/-).

Solution: (a) The adjustment required in H's. accounts is:-

H. (1) Revenue Account	Dr. £3,000	
To Invest. A/c (in S.)		£3,000
(Being S's. credit balance on Rev. A/c at 31/12/46 - pre-acqn. when H. bought all S's. shares.)		

(b) The Aggregation of the Adjusted Balance Sheets is:-

Liabilities	Total	H.	S.	Assets	Total	H.	S.
Capital	£1,050,000	1,030,000	20,000	Sundry Assets	£1,328,000	1,300,000	28,000
Premium on shares	6,000	6,000		Invest. in S.			
Creditors	205,000	200,000	5,000	at adjusted			
Revenue A/c	100,000	97,000	3,000	cost	33,000	33,000	
	<u>£1,361,000</u>	<u>1,333,000</u>	<u>28,000</u>		<u>£1,361,000</u>	<u>1,333,000</u>	<u>28,000</u>

(c) The Consolidated Statement is:-

Liabilities		Assets	
Sh. Cap. H.	£1,030,000	Sundry Assets	£1,328,000
Creditors	205,000	<u>Goodwill Net Cost of Control to H.</u>	
Sh. Premium A/c £6,000 (Transferred to Goodwill)		Adjusted Cost	£33,000
Revenue A/c	100,000	Par	20,000
			<u>£13,000</u>
		Less:	
		Sh. Prem. A/C	<u>6,000</u>
	<u>£1,335,000</u>		<u>7,000</u>
			<u>£1,335,000</u>

Note: By taking advantage of the market value of its own shares, H. has acquired 20,000 £1 shares in S. for a net £30,000, although S. shares are worth £36,000 in the open market.

Dividends declared but unpaid (inter-company).

Where a fully-owned subsidiary declares a dividend but does not pay it before the balancing date, it may appear as a liability in the Balance Sheet of the subsidiary and as an Asset in that of the holding company and the amounts will agree and cancel out in the consolidated statement provided both companies state the dividend in the same way, i.e. either gross or net (after deduction of tax). If the unpaid dividend is shown "gross" in one company and "net" in the other an adjustment must be made in either member's Accounts /

Accounts by a transfer of the difference representing Income Tax to Income Tax Account. This adjustment will affect the Profit and Loss Account figure where the balance on Income Tax Account is transferred thereto. If one company has the outstanding dividend in its Balance Sheet and the other company has omitted it, either company's Accounts must be adjusted - it does not matter which - as the dividend must either appear in both adjusted Balance Sheets and form a set off, or be omitted from both, for consolidation purposes.

In view of the ever varying rates of Income Tax the gross figures in respect of accrued dividends have been used for simplicity in the examples throughout this treatise. In practice, however, accruals will generally require to be made on the basis of net figures since the balance on Profit and Loss Account will usually represent a net surplus available to the shareholders after provision for all national taxation.

Different Balance Sheet dates

Although it is desirable that all members of a group should make up their Balance Sheets to the same date, different dates are sometimes inevitable where heavy stocks are carried and the natural business years do not coincide. Nevertheless, a Consolidated Statement may be prepared in the same way and the only matter which requires special treatment is the inter-company balances which are unlikely to agree. The difference in these balances is shown in the Consolidated Statement as an Asset or Liability as the case may be, under a separate heading sometimes designated "Adjustment Account" or "Suspense Account" with a suitable narrative such as "for transactions with subsidiaries between the dates of their Balance Sheet and that of the holding company."

Different Balance Sheet dates are undesirable for unscrupulous directors may "window dress" ^{Balance Sheets} and the resultant Consolidated Statement by means of an inter-company transfer of cash between the dates.

Foreign Subsidiaries.

A subsidiary incorporated abroad is included in a Consolidated Statement /

statement by the converting of the foreign currency to sterling according to the method normally adopted for foreign branch accounts namely:-

- (a) Fixed Assets and Liabilities at the rates ruling when control was acquired or when the Assets^{were} purchased, whichever is the later date.
- (b) Floating Assets and Current Liabilities at the rate prevailing on the Balance Sheet date.
- (c) Revenue Account items at the average rate of the period under review.
- (d) Remittances at their actual cost or realised sterling figure. After conversion any difference is put to a "Difference on Exchange Account" and written off if a loss, or carried forward (if a profit) as a reserve to meet possible future losses.

A subsidiary may be operating in a country with which there are exchange difficulties or where the Government has forbidden or restricted remittances. In such circumstances the foreign subsidiary's Assets and Liabilities should not be included under their respective headings in the Consolidated Statement but the amount invested shown in total separately, with an explanatory note indicating the reason for the special treatment of the foreign subsidiary.

Where exchange rates are fluctuating to a marked extent two points should be noted. In the first place as regards stock on hand, care should be taken to see that there is no fictitious profit or loss on exchange arising on goods sold to a foreign subsidiary by a group member at home or vice versa. Secondly, depreciation on a foreign subsidiary's Fixed Assets, which depreciation is normally converted at the rate ruling when the assets were acquired, may require exceptional treatment by the creation of a special reserve to cover the paper inflation of profits due to a foreign currency devaluation. These points arise in ordinary foreign branch accounting to which the reader is referred.

Subsidiary purchased with the intention of winding up.

A competitor company may be bought with the idea of closing down the business and liquidating the company as soon as practicable. In the general case, it would be undesirable to incorporate the figures of such a new subsidiary in the usual way in a Consolidated Statement; it would seem better to show the temporary investment as a separate item on the assets side of the Statement. After liquidation of the new subsidiary, a loss on realisation represents the cost of ridding the group of the previous competition and could be written off against the holding company's profits over a period of years (say 3 - 5 years). A profit on realisation, which will be unusual in most cases, should be regarded as a capital profit and credited to Capital Reserve Account in the financial books of the holding company.

It may take a year or two for the group to take over the trade and organisation of the old competitor and if it is desired, the new subsidiary may be treated like any other subsidiary and included in the Consolidated Statement in the usual way until it is wound up.

The creation in a balance sheet of a reserve for losses on realisation of investments in subsidiaries, which would show a lack of confidence in the subsidiary, although a holding company might be able to do this for shares in a subsidiary, is doubtful. In the case of a subsidiary which has incurred losses, it may be that the losses should be carried by the subsidiary, the directors of the subsidiary should be asked to do this but to leave them at the disposal of the subsidiary.

CHAPTER IV. The fully-owned Subsidiary (continued).

Anticipated Post-acquisition losses of a Subsidiary (fully owned)
during a Reorganisation Period.

A holding company may purchase a non-prosperous subsidiary which requires to be completely reorganised after acquisition. The general nature of the business will determine what is a reasonable reorganisation period. In the heavy industries it may take some time to re-equip the factory with modern plant and to adjust the lay-out to give eventual efficiency and economies in production. During such a transitional stage, business connections must be maintained and losses incurred may be legitimately capitalised and carried forward as an asset in subsequent Balance Sheets of the subsidiary under the heading of "Cost of Reorganisation" or "Reorganisation Account." During the preparation of the Consolidated Statement this fictitious asset should be transferred to the Net Cost of Control of the subsidiary but only to the extent of the amount of anticipated post-acquisition losses which was in the minds of the directors of the holding company when the subsidiary was purchased, and which had the effect of lowering the offer made for the subsidiary's shares. In so far as these losses were not discounted in the offer, they should appear under the heading of "Cost of Reorganisation" in the Consolidated Statement until such time as they have been written off by appropriations from subsequent profits of the subsidiary.

The creation in a Balance Sheet of a fictitious asset such as "Cost of reorganisation" may not appeal to a conservative board of directors; indeed there may be many cases where its creation would show a lack of sound business acumen. Accordingly, although a holding company may make a reduction in its offer for shares in a subsidiary, in respect of anticipated post-acquisition losses, it may be that when these losses are actually incurred by the subsidiary, the directors decide not to capitalise them but to leave them at the debit of Profit and Loss Account as in /

in the case of normal trading losses. In these circumstances no transfer of these losses to the Net Cost of Control of the subsidiary should be made for consolidation purposes since the anticipated post-acquisition losses have been treated in the financial accounts as a debit to revenue.

It is stressed that there is no general rule that post-acquisition losses of a subsidiary form a set off against a credit balance on the Net Cost of Control of that subsidiary. The transfer is only permissible when two conditions exist concurrently:

- (a) when these losses are capitalised by the subsidiary and only so long as they remain so.
- (b) when, and to the extent, the losses were anticipated by the holding company and were discounted in the offer made for the shares.

Ex. 8

Debit balance on Profit and Loss Account at acquisition date.

Anticipated Post-acquisition losses capitalised during a reorganisation period.

H. purchased all S's. Share Capital in 1938 when S's.

summarised Balance Sheet was:-

<u>Liabilities</u>		<u>Assets</u>	
Share Capital (in £1 Ord. Shs.)	£20,000	Sundry Assets	£24,000
Creditors	<u>8,000</u>	Profit & Loss A/c	<u>4,000</u>
	<u>£28,000</u>		<u>£28,000</u>

Prior to this purchase S. had been trading at a loss and accordingly when making the offer for the shares, H. anticipated further losses of S. at £3,000 during the two years following the purchase, that it would take to reorganise and re-equip S.

If S's. assets were fairly valued at £24,000 in 1938, the price of S's. shares per the above Balance Sheet is 16/- each. The discounting of anticipated losses of £3,000 would reduce the price to 13/- per share.

Let it be assumed that 13/- per share is a higher price than break-up value, and that H. bought all S's. shares at the theoretical /

theoretical price of 13/- each.

The losses due to reorganisation during 1938/39 were in fact £4,500 and were capitalised by S. as "Cost of Reorganisation." In 1941 S. appropriated £1,000 from current profits and wrote down "Cost of Reorganisation Account" to £3,500.

The summarised Balance Sheets at 31st December 1946 were:-

<u>Liabilities</u>	<u>H.</u>	<u>S.</u>	<u>Assets</u>	<u>H.</u>	<u>S.</u>
Share Capital (in £1 Ord. Shs.)	£100,000	£20,000	Sundry Assets	£112,000	£31,500
Loan from H		5,000	Loan to S.	5,000	
Creditors	20,000	4,500	Investment in S. at cost		
P. & L. A/c	10,000	5,500	20,000 Ord. Shs. at 13/- each.	13,000	
			Cost of Reorganisation, less amounts written off		3,500
	<u>£130,000</u>	<u>£35,000</u>		<u>£130,000</u>	<u>£35,000</u>

Solution:

(a) The adjustment required in H's. accounts is:

Investment A/c (in S.)	Dr. £4,000
To Revenue A/c	£4,000
(Being pre-acquisition debit balance on S's. Rev. A/c in 1938 when H. bought all the capital of S.)	

(b) The aggregation of the adjusted Balance Sheets is:-

<u>Liabilities</u>	<u>Total</u>	<u>H.</u>	<u>S.</u>	<u>Assets</u>	<u>Total</u>	<u>H.</u>	<u>S.</u>
Capital	£120,000	£100,000	£20,000	Sundry Assets	£143,500	£112,000	£31,500
Loan from H.			5,000	Loan to S.		5,000	
Creditors	24,500	20,000	4,500	Investment at Adjusted Cost	17,000	17,000	
Revenue A/c	19,500	14,000	5,500	Cost of Reorganisation	3,500		3,500
	<u>£164,000</u>	<u>£134,000</u>	<u>£35,000</u>		<u>£164,000</u>	<u>£134,000</u>	<u>£35,000</u>

(c) The Consolidated Statement is:-

<u>Liabilities</u>	<u>Assets</u>
Share Capital H.	Sundry Assets
Creditors	Cost of Reorganisation of Subsidiary, not written off nor provided for
Revenue A/c	Per S's. Balance Sheet £3,500
Divisible thus:-	Less: Transferred to Net Cost of Control - amount anticipated by H.
P. & L. A/c £15,500	Goodwill - Net C. of C.
Gen. Res. <u>4,000</u>	Adjusted Cost
	Par value
	Less: Transferred Cr. from Cost of Reorganisation
<u>£144,000</u>	<u>£144,000</u>

Notes: /

Notes: (1) Observe that only £3,000 of "Cost of Reorganisation" is transferred to the credit balance on Net Cost of Control. This transfer is the amount anticipated by H. at acquisition date and discounted in the offer made for the shares.

(2) It would be prudent for the directors of S. to use S's. profits to reduce the fictitious asset "Cost of Reorganisation" still further. From the group's standpoint, there is no need to write off more than a further £500 which leaves the asset at £3,000, since H. has a "reserve" equal to this sum in its Balance Sheet - in the valuation of Investment in S. £13,000. The sellers of the shares in S. to H. in 1938 have borne £3,000 of the Cost of Reorganisation in the price they accepted for the shares (13/- each).

If S. wrote off the whole of the Cost of Reorganisation against profits, so much the better for the group; subsequent Consolidated Statements would disclose a Capital Reserve of £3,000 representing Net Cost of Control of S.

(3) As this is the first example of a pre-acquisition debit balance £4,000 on Profit and Loss Account of the Subsidiary, the adjustment required in H's. Accounts, viz.

Investment Account (in S.)	Dr. £4,000	
To Revenue Account		£4,000

should be noted and understood. Stated briefly, it is the reverse of that required in the case of pre-acquisition profits but, considered in detail, the two entries can be explained thus:-

(a) The debit of £4,000 to Investment Account.

This increases the cost price of the shares £13,000 because, in order to bring out the amount (if any) paid for Goodwill (nil in example) it must be the "Adjusted Cost" which is compared with par value, £20,000. In fixing 13/- per share as the purchase price, H. made a full deduction of £4,000 for the debit balance in S's. Profit and Loss Account.

(b) The credit of £4,000 to H's. Revenue Account.

This £4,000, together with £5,500 the current balance at credit of S's. Profit and Loss Account, are correct credits to group revenue. From a revenue viewpoint, the group is only interested in the post-acquisition results of S., and during the period since acquisition S., by its trading results, has turned a debit balance of £4,000 on Profit and Loss Account in 1938 into a credit balance of £5,500 in 1946. This gives a post-acquisition profit of £9,500 plus any dividends declared by S. which will have been credited to H's. Profit and Loss Account and are thus already in the group revenue.

The Revenue Account £19,500 as shown in the Consolidated Statement is made up thus:-

H's. undistributed earnings to date	£10,000	
S's. " " from date of acquisition (1938) to date		
Balance at credit at date . . .	£5,500	
" " debit in 1938 . . .	<u>4,000</u>	
		<u>9,500</u>
Group /		<u>£19,500</u>

Group Revenue Account £19,500 has been sub-divided thus:-

Group Profit and Loss Account	£15,500
" General Reserve	<u>4,000</u>

The transfer of £4,000 to Group General Reserve has been made in order to keep Group Profit and Loss Account in line with the undistributed profits of the members as shown in their legal Balance Sheets (H. £10,000 S. £5,500). The £4,000 represents the amount of profits earned by S. but not available for dividend paying as it has been used to extinguish S's. debit balance of Profit and Loss Account at acquisition date. It is therefore desirable to show this amount as a Group General Reserve rather than at credit of Group Profit and Loss Account.

The Writing Down of the Book Value of Investments to cover losses, &c.

Quite apart from a company correctly crediting to Investment Account dividends received in so far as they represent pre-acquisition profits of a subsidiary, a holding company may consider it prudent to allocate a sum from its own profits to cover post-acquisition losses incurred by a subsidiary. The amount so allocated may be credited to a Special Reserve Account or to Investment Account itself. In the latter case the book value of the shares is reduced. In the preparation of Consolidated Statements it must be remembered that actual losses of a subsidiary are transferred to the Group Profit and Loss Account, and care must be taken to see that the same loss, or part thereof, is not being debited to group revenue twice. A reserve created by the holding company from its own profits may, therefore, be considered a set off against the post-acquisition loss falling to the holding company from the subsidiary in the process of consolidation. If the book value of "Shares in the subsidiary" has been written ^{down} in the financial books of the holding company, the book value should be increased during the process of consolidation by the transfer of the holding company's provision for the subsidiary's loss, to a temporary Special Reserve Account to which the subsidiary's post-acquisition losses may be off-set to the extent of that reserve.

Ex. 9 The Writing down of the Book Value of Investments in respect of current losses only

Ex. 9 The Writing down of the Book Value of Investments in respect of current losses only:

The summarised Balance Sheets of a group as at 31st Dec. 1946 are:-

<u>Liabilities</u>	<u>H.</u>	<u>S.</u>	<u>Assets</u>	<u>H.</u>	<u>S.</u>
Sh. Cap. (in £1 Ord. Shs.)	£100,000	£20,000	Sundry Assets	£112,000	£24,000
Creditors	20,000	7,000	Invest. in S. (20,000 shs.)	18,000	
Revenue Account . . .	<u>10,000</u>		Revenue Account		<u>3,000</u>
	<u>£130,000</u>	<u>£27,000</u>		<u>£130,000</u>	<u>£27,000</u>

Notes: (1) H. acquired all S's. shares at par on incorporation of S.

(2) To cover S's. losses, H. allocated in 1946 from its own profits £2,000 and thereby reduced the Book Value of its investment from £20,000 to £18,000.

Solution: (a) The adjustment required in H's. accounts is:-

H. (1) Investment Account (in S.) . . .	Dr. £2,000
To Special Reserve	£2,000

(Being transfer to Special Reserve of the allocation of £2,000 from H's. profits made in 1946 in order to reduce the Book Value of S's. shares to £18,000).

(b) The aggregation of adjusted Balance Sheets is:-

<u>Liabilities</u>			<u>Assets</u>				
<u>Total</u>	<u>H.</u>	<u>S.</u>	<u>Total</u>	<u>H.</u>	<u>S.</u>		
Capital . . .	£120,000	£100,000	£20,000	Sundry Assets	£136,000	£112,000	£24,000
Creditors	27,000	20,000	7,000	Invest. in S. (at Adjusted Cost)	20,000	20,000	
Rev. A/c	7,000	10,000	-	Revenue A/c	-		3,000
Spec. Res.	<u>2,000</u>	<u>2,000</u>					
	<u>£156,000</u>	<u>£132,000</u>	<u>£27,000</u>		<u>£156,000</u>	<u>£132,000</u>	<u>£27,000</u>

(c) The Consolidated Statement is:-

<u>Liabilities</u>			<u>Assets</u>		
Share Capital H.	£100,000		Sundry Assets		£136,000
Creditors	27,000		Goodwill - Net C. of C. to H.		
Rev. A/c	£7,000		Adjusted Cost	£20,000	
Add: Spec. Res. created by H. to cover S's. losses	<u>2,000</u> *	<u>9,000</u>	Par	<u>20,000</u>	
		<u>£136,000</u>		<u>£136,000</u>	

* Note: The transfer of £2,000 from Special Reserve to the credit of group revenue is necessary in order that Group Revenue Account should show the true balance, i.e. the undistributed earnings of the /

the holding company together with those of the subsidiary since acquisition date. If this transfer is not made, part of S's loss is being debited twice to group revenue; once when the full post-acquisition result of S. (Dr. £3,000) is debited during the process of consolidation, and once when H. debited its P. & L. A/c in its financial books with £2,000 in 1946 to provide for S's losses. (The £10,000 at credit of H's. Revenue Account at 31st Dec. 1946 is the balance after debiting this £2,000).

Where a Subsidiary was acquired when prosperous, and later incurs losses, the holding company may decide to allocate from its own profits a sum to cover not only the post-acquisition losses of the subsidiary, but also the obvious fall in the value of the subsidiary's Goodwill which is included in the original purchase price of the shares. The Special Reserve created in these circumstances is available -

- (a) to write off post-acquisition losses to date to the extent provided for, and -
- (b) to reduce the value of Goodwill in the Consolidated Statement.

Ex. 10. The Writing down of the Book Value of Investments in respect of losses and fall in value of Goodwill.

The summarised Balance Sheets of a group as at 31st Dec. 1946.

<u>Liabilities</u>	<u>H.</u>	<u>S.</u>	<u>Assets</u>	<u>H.</u>	<u>S.</u>
Sh. Cap. (in £1 Ord. Shs)	£100,000	£20,000	Sundry Assets	£110,000	£24,000
Creditors	20,000	6,000	Invest. in S. (20,000 shs.) at cost, less amt. writ. off	20,000	
Rev. A/c	10,000	-	Rev. A/c	2,000	
	<u>£130,000</u>	<u>£26,000</u>		<u>£130,000</u>	<u>£26,000</u>

H. purchased all shares in S. in 1938 at 25/- each, when S. was prosperous and had a credit balance on Revenue Account of £1,000. In recent years S. has been incurring losses and in Jan. 1946 H. allocated from its own profits, £5,000, to cover these losses estimated at £1,500 and to write down the value of its holding in S. H's. Investment Account is:-

Cost of 20,000 shs. in S. bought in 1938	£25,000
Less: Amount written off in Jan. 1946	<u>5,000</u>
Book value at 31st Dec. 1946	<u>£20,000</u>

Solution /

Solution:(a) The adjustments required in H's. accounts are:-

H. (1) Revenue Account Dr. £1,000
 To Investment Account (in S.) £1,000

(Being S.'s credit balance on Revenue Account in 1938 -
 pre-acquisition - when H. bought all S.'s shares).

H. (2) Investment Account (in S.) Dr. £5,000
 To Special Reserve £5,000

(Being transfer to Special Reserve of amount allocated
 from profits by H. in Jan. 1946 which reduced the Book
 Value of S's. shares).

(b) The Aggregation of the Adjusted Balance Sheets. is:-

<u>Liabilities</u>			<u>Assets</u>			
<u>Total</u>	<u>H.</u>	<u>S.</u>	<u>Total</u>	<u>H.</u>	<u>S.</u>	
Capital . . . £120,000	£100,000	£20,000	Sundry Assets	£134,000	£110,000	£24,000
Creditors . . . 26,000	20,000	6,000	Invest. in S. at Adjusted Cost	24,000	24,000	
Spec. Res. . . . 5,000	5,000		Rev. A/c	-	-	2,000
Rev. A/c 7,000	9,000					
<u>£158,000</u>	<u>£134,000</u>	<u>£26,000</u>	<u>£158,000</u>	<u>£134,000</u>	<u>£26,000</u>	

(c) The Consolidated Statement is:-

<u>Liabilities</u>		<u>Assets</u>	
Share Capital H.	£100,000	Sundry Assets	£134,000
Creditors	26,000	<u>Goodwill - Net C. of C. to H.</u>	
<u>Special Reserve</u> £5,000		less sum written off	
Less: Provision for post-acqn. losses of S. included therein <u>1,500</u>		Adjusted Cost	£24,000
To Goodwill <u>£3,500</u>		Par	<u>20,000</u>
			£ 4,000
		<u>Less: Balance of</u>	
Revenue A/c	£7,000	Spec. Res. A/c	<u>3,500</u>
Add: Portion of Spec. Res. <u>1,500</u>	<u>8,500</u>		500
	<u>£134,500</u>		<u>£134,500</u>

Notes: (1) The transfer to Revenue from Special Reserve (£1,500) is the amount of the loss of S. as estimated when the 1946 allocation was made in the financial books of H.

(2) It is clear that the 1946 results of S. have been disappointing and S's. Goodwill has vanished and perhaps even become "Badwill." It is for the directors of H. to consider in 1947 whether /

whether the Investment in S. should not be further written down in value by an appropriation from H's. current Profit and Loss Account balance.

(3) Apart from the amount written off in 1946 the investment in S. has remained "at cost" in H's. books. Any dividend paid by S. after 1938 must have been paid out of profits earned by S. since acquisition otherwise H. would have credited Investment Account with the proportion of any dividend received which was paid out of pre-acquisition earnings. After S's. prosperous period, the losses of S. have used up the pre-acquisition credit balance £1,000.

(4) Group Revenue Account £8,500. This can be reconciled by a consideration of the results of H. and S. The group revenue balance must represent the undistributed earnings of the holding company together with those of the subsidiary since acquisition date only.

H.	Credit balance on Revenue Account at 31/12/46	£10,000
	<u>Add:</u> Amount debited to H's. P. & L. A/c in Jan. '46 to cover S's. losses - adjustment necessary as in the consideration of S. below the full post-acqn. loss of S. is debited	<u>1,500</u>
		£11,500 cr.
S.	Debit balance on Revenue Account at 31/12/46	
		Dr. £2,000
	Credit " " " " in 1938	Cr. <u>1,000</u>
	Loss for intervening period 1938-46 or - Excess of divds. paid over profits earned 1938-46	<u>£3,000</u>
	chargeable to group	<u>£3,000 dr.</u>
	Credit balance per Consd. St. ^t	<u>£8,500</u>

Further consideration of depreciation adjustments

In the section in Chapter III headed "Depreciation adjustments and Revaluation of Fixed Assets" the provision made in the Consolidated Statement for inadequate or excessive depreciation written off in the financial books was outlined, but discussion on certain aspects was deferred in order that the reader might first acquire further knowledge regarding the general preparation of Consolidated Statements.

In this section there will now be considered:-

- (a) The position at the date the asset is written down to nil (either in the financial books or in the Consolidated Statement) in the case where, although there was no revaluation of the asset by the holding company at acquisition date, the annual depreciation thereafter written off in /

in the Consolidated Statement differs from that written off in the financial books, and -

- (b) The treatment of depreciation on a valuation difference, i.e. the difference at the date the holding company acquired the subsidiary between the value of an asset per the subsidiary's financial accounts and the valuation of that asset made by the holding company (a revaluation of Fixed Assets).
- (a) Where the amount of annual depreciation written off in the Consolidated Statement differs from that written off in the financial books, the date on which the asset is reduced to nil or scrap value in the Consolidated Statement will be either earlier or later than in the financial books. The date will, of course, coincide where the asset is sold or scrapped. The point to note is that it is inevitable that on some future date, however remote that may be, the asset must disappear from both the financial books and the Consolidated Statement. In both ^{there} will have ^{been} charged to revenue the same amount in total, although different amounts each year, as depreciation or obsolescence. If the asset is being depreciated by a fixed percentage on the reducing value each year, it is never reduced to nil. As this is the usual method adopted in practice, the common case to be found will be that the valuation of the asset reaches scrap value, or that the asset is sold or scrapped.

The following four somewhat extreme illustrations - there are two examples of inadequate depreciation written off in the financial books, followed by two examples of excessive depreciation - show how, in the aggregate depreciations written off, the difference increases as the years pass during the life of the asset, until a date is reached when the difference decreases. The difference disappears eventually when the asset is no longer in existence. The rate of depreciation used has been exaggerated purposely in order to bring finality within a few years. (In practice with the usual depreciation rates of from 5% - 10% it may take many years before the amount written off in total in the financial books eventually agrees with the /

the amount written off in total in the Consolidated Statements.) In all cases it should be observed that, as finality must come on some date, there is no question of the Group Revenue Account becoming permanently out of line with the Revenue Accounts of the financial books. In the interval the differences should be adjusted in the Group General Reserve or Group Special Reserve so that, at all times, the Group Profit and Loss Account bears the closest relation possible to the divisible profits of the members.

Illustration 1.

Inadequate depreciation in financial accounts of a Subsidiary.

Asset reduced to nil in the financial books and in the Consolidated Statement on the same date.

In the financial books of a subsidiary, Special Plant is valued at £1,000 on the date the holding company acquired control of the subsidiary. The plant is depreciated at 25% per annum on the reducing annual figure in the financial books and this rate is continued in the future. The holding company, while accepting the valuation of £1,000 at acquisition date, decides that the rate of depreciation for consolidation purposes should be increased to $33\frac{1}{3}\%$ per annum. The Plant is sold for £100 six years after the holding company acquired control of the subsidiary.

The yearly value of the asset during the last six years of its life, may be tabulated thus:-

	Per. Prin. A/cs of Sub. Depn. at 25%.	Per Cons. St. Depn. at 33 1/3%.	Dif. in Valn. at end of each year.	Adjusting entry in Sub's. A/cs reqd. for the purpose of preparing the Cons. St. each year.
Value of Sub's. Plant at date H. Co. acquired control of Sub		£1,000		
Depn. w/o 1st yr. following	£250	£333	£83	£83 cr. to Plant A/c and dr. to Rev. A/c (Gen. Res.)
" " 2nd yr. "	187	222	118	118 Do.
" " 3rd yr. "	141	148	125	125 Do.
" " 4th yr. "	105	99	119	119 Do.
" " 5th yr. "	79	66	106	106 Do.
Plant sold in 6th yr. for	100	100		
Obsolence w/o 6th yr.	138	32		
Amt. charged to Rev. in total over 6 yrs. (same in each case)	£ 900	£ 900		

No adjust. made in 6th yr. (Plant sold). The Group would take the Sub's. 6th yr's profit, already charged with £138 obsolescence, but the Group would make no further adjust. for additional depn. The effect on the Group Rev. A/c in the 6th yr. is a debit of £32 made up thus:-

Gr. P. & L. A/c — £138 (from Sub.)
 Gr. Gen. Res. + 106
£ 32

Illustration 2 Inadequate depn. in fin. A/cs of a Sub. Asset reduced to scrap value earlier in the Consd. St. than in the financial books.

After a group is formed, a Sub. buys Special Plant for £1000. In the fin. bks. of the Sub. this is depd. at 15% p.a. on the original cost. The H. Co. decides that this rate is inadequate and that 25% p.a. on the original cost will be w/o for consd. purposes. The plant is still in use after the 7th yr. following its purchase. The scrap value of the plant is estimated at £40.
 The yearly value of the asset during the first 7 yrs. of its life may be tabulated thus:-

	Original Cost of Plant	Depn. w/o 1st yr.	Per Fin. A/cs of Sub. Depn. at 15%	Per Consd. St. Depn. at 25%	Dif. in Valn. at end of each yr.	Adjusting Entry in Sub's A/cs reqd. for the purpose of preparing the Consd. St. each year.
	£1000					
		£150	£150	£250	£100	£100 cr. to Plant and dr. to Rev. A/c (Gen. Res.)
"	" 2nd yr.	150	£700	£500	200	do.
"	" 3rd yr.	150	£550	£250	300	do.
"	" 4th yr.	150	£400	£40	360	do.
"	" 5th yr.	150	£250	£40	210	do.
"	" 6th yr.	150	£100	£40	60	do.
"	" 7th yr.	60	£40	£40	Nil	
	Scrap Value	60	Nil	Nil	Nil	

No adjust. since plant is reduced to scrap value in both the fin. bks. and the consd. st.

Amt. charged to Rev. in total over 7 yrs.

£ 960

£ 960

(same in each case)

Illustration 3 Excessive depn. in fin. A/cs of a Sub. Asset reduced to nil in the fin. bks. and in the Consd. St. on the same date.

Facts as in illn. 1. except that the H. Co. decides that the rate of depn. for consⁿ purposes should be decreased to 20% p.a.

The yearly value of the Asset during the last 6 yrs. of its life may be tabulated thus:-

	Per Fin. A/cs of Sub. Depn. at 25% p.a.	Per Consd. St. Depn. at 20% p.a.	Dif. in Valn. at end of each yr.	Adjusting entry in Sub's A/c for the purpose of preparing the Consd. St. each year.
Value of Sub's Plant at date H. Co. acquired control of Sub.	\$1000	\$1000		
Depn. w/o 1st yr. following	\$250	\$200	\$50	\$50 dr. to Plant A/c and cr. to Special Reserve Account
" " 2nd yr.	187	160	77	77 do.
" " 3rd yr.	141	128	90	90 do.
" " 4th yr.	105	102	93	93 do.
" " 5th yr.	79	82	90	90 do.
Plant sold in 6th yr. for obsoles. w/o in 6th yr.	138	228	Nil	
Amt. charged to Rev. in total over 6 yrs. (same in each case)	\$900	\$900		

No adjust^t made in 6th yr. (Plant sold)
 The Group would take the Sub's 6th yr. profit already charged with \$138 for obsoles. but the Group would make no further adjust^t for depn. The effect on the Group Rev. A/c in the 6th yr. is a debit of \$228 made up thus:-

Group P. & L. A/c . . . \$138 (from Sub.)
 Group Special Reserve . . . 90 (disappears)
\$228

Illustration 4 Excessive depn. in fin. A/cs of Sub. Asset reduced to scrap value earlier in fin. bks. than in the Consd. St.

Facts as in illn. 2 except that the rates of depn. are reversed, i.e. fin. bks. depreciate plant at 25% on original cost while group determines that 15% is adequate. The yearly value of the asset during the first 7 yrs. of its life may be tabulated thus:-

Original Cost of Plant	Depn. w/o 1st yr. £250	Per Fin. A/cs of Sub. Depn. at 25%	Per Consd. St. Depn. at 15%	Dif. in Valn. at end of each year.	Adjusting entry in Sub's A/c for the purpose of preparing the Consd. St. each year.
£1000	£150	£150	£850	£100	£100 dr. to Plant A/c and cr. to Special Res. A/c
"	" 2nd " 250	£250	£500	200	200 _____ do. _____
"	" 3rd " 250	£250	£550	300	300 _____ do. _____
"	" 4th " 210 Scrap Value £40	£210	£400	360	360 _____ do. _____
"	" 5th " Nil	£40	£250	210	210 _____ do. _____
"	" 6th " Nil	£40	£100	60	60 _____ do. _____
"	" 7th " Nil	£40	£40	Nil	Nil _____ do. _____

No adjust. since Plant is reduced to scrap value in both the fin. bks. and the Consd. St.

Amt. charged to Rev. in total over 7 years

(same in each year)

£960

£960

- (b) The treatment of depreciation on a valuation difference, i. e.
 the difference at the date the holding company acquired the subsidiary between the value of an asset per the subsidiary's financial accounts and the valuation of that asset made by the holding company.

When the holding company in acquiring control of a subsidiary, makes a re-valuation of a fixed asset of the subsidiary, this re-valuation affects the price offered for the shares. In the Consolidated Statement of the new group, the asset is written up (under-valuation in the financial books) or written down (over-valuation in the financial books) by a credit or debit respectively to a created Capital Reserve Account. The balance on the Capital Reserve Account is at a later stage of consolidation transferred to the Net Cost of Control of the subsidiary and the final balance on Net Cost of Control discloses the true hidden Goodwill of the subsidiary at acquisition date.

The fixed asset revalued may be subject to depreciation each year and the portion of the asset - the portion representing the valuation difference - will be affected by depreciation thereon. It is suggested that such depreciation should be provided for in the Consolidated Statement in a special way and must not be confused with the adjustments required for excessive or inadequate depreciation on the book value of the asset (see (a) above). Depreciation on the amount of the valuation difference should not be adjusted in the Group Revenue Account as this would result in this account becoming quite out of line with the divisible profits as shown by the members' accounts during the perhaps long life of the asset. The suggested treatment will now be considered firstly in the case of an under-valuation and secondly in the case of an over-valuation. It is by no means a simple adjustment.

Under-valuation in the Subsidiary's financial books.

A holding company in buying shares in a subsidiary, naturally takes /

takes into account any under-valued assets in the subsidiary's financial books and increases the offer for the shares accordingly. The position here is that the holding company pays for a portion of an asset, (the valuation difference) which portion does not exist in the financial books of the subsidiary. If the asset is a wasting asset e.g. Plant, the subsidiary will not provide for any depreciation on the valuation difference and in theory, depreciation on the amount of the under-valuation should be provided for in the financial books of the holding company - Profit and Loss Account Dr; Investment in subsidiary Cr., by the amount of depreciation each year. If the holding company adopts this policy then the value of "Investment in Subsidiary" will be written down each year. In practice, however, this writing down may not be done in the financial books of the holding company; in fact one could safely say that in the usual case, this somewhat obscure theoretical point would not have occurred to the directors of the holding company.

In the preparation of the Consolidated Statement, the created Capital Reserve represents the amount of the under-valuation, and it is suggested that this reserve should be decreased each year by depreciation on the valuation difference. The amount of the consolidation entry - Plant Account Dr.; Capital Reserve Cr. - made in each successive year when the Accounts of the subsidiary are adjusted, will therefore gradually decrease. Since this created Capital Reserve is transferred to Net Cost of Control at a later stage of consolidation, the effect will be to increase gradually the Net Cost of Control figure (assuming it is a debit balance) as the years pass. This increase is inevitable, but if the holding company ~~was~~ provides for depreciation on the valuation difference in its financial books as suggested above, the increase ~~would~~ ^{will} be exactly offset each year and the Net Cost of Control ~~would~~ ^{will} remain at the same figure throughout and ~~would~~ ^{will}, of course, represent the hidden Goodwill of the subsidiary at acquisition date (see Illustration 5).

The /

The climax is reached when the asset is sold or scrapped, for it will (then) not appear in the Balance Sheet of the subsidiary, and there can be no consolidation adjustment, (Dr. Asset Account; Cr. Capital Reserve Account) there being no asset to adjust. After that date the Net Cost of Control will be increased by the full amount of the under-valuation unless the holding company in its financial books has taken steps to write down the book value of "Investments in subsidiary" either by annual sums or by writing off in a lump sum, the amount (included in the original purchase price of the shares) which represents the under-valuation of an asset which is now non-existent, (see Illustration 5).

Illustration 5.

Under-valuation of Plant of a subsidiary at acquisition date.
Treatment of depreciation on the valuation difference
during the future life of the asset.

The Balance Sheets of a holding company (H) and its subsidiary (s) at various dates are as follows:-

<u>Liabilities</u>	At acqn.	2 yrs.	6 yrs.	<u>Assets</u>	At acqn.	2 yrs.	6 yrs.
	date	later	later		date	later	later
				<u>H. LTD.</u>			
Sh. Cap. (in £1 Ord. Shs.)	£50,000	£50,000	£50,000	Investment in S. 20,000 shs. at cost	£23,000	£23,000	£23,000
Creditors . .	15,000	16,000	14,000	Other Assets . .	52,000	51,000	50,000
Gen. Res.	1,000	1,000	1,000				
P. & L. A/c	9,000	7,000	8,000				
	<u>£ 75,000</u>	<u>£74,000</u>	<u>£73,000</u>		<u>£75,000</u>	<u>£74,000</u>	<u>£73,000</u>

S. LTD.

Sh. Cap. (in £1 Ord. Shs.)	£20,000	£20,000	£20,000	Special Plant at cost less 25% depn.	£1,000	£ 563	-
Creditors	6,000	8,000	5,000				
P. & L. A/c	-	1,000	1,500	Other Assets	25,000	28,437	26,500
	<u>£26,000</u>	<u>£29,000</u>	<u>£26,500</u>		<u>£26,000</u>	<u>£29,000</u>	<u>£26,500</u>

H /

The Aggregations of the adjusted Balance Sheets are so simple that they are not given.

The Consolidated Statements of Assets and Liabilities are:

At Aggregation date

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H.	£50,000	Special Plant (1000 + 400) under-valn.	£1,400
Creditors	21,000	Other Assets	77,000
Rev. A/c	19,000	<u>Goodwill - Net C. of C. of S to the group.</u>	
Divisible		Adjusted cost (equals cost for there is no pre-acqn. balance)	£23,000
Gen. Res.	£1,000	Less: Cap. Res.	400
P. & L. A/c <u>9,000</u>			£22,600
		Par value	20,000
			2,600
	<u>£ 81,000</u>		<u>£81,000</u>

2 years later

Sh. Cap. H.	£50,000	Special Plant (563 + 225) under-valn.)	£ 788
Creditors	24,000	Other Assets	79,437
Rev. A/c	9,000	<u>Goodwill - Net C. of C. of S to the group</u>	
Divisible		Adjusted Cost	£23,000
Gen. Res. £1,000		Less: Cap. Res.	225
P. & L. A/c <u>8,000</u>			£22,775
		Par value	20,000
			2,775
	<u>£83,000</u>		<u>£83,000</u>

6 years later (Special Plant disposed of)

Sh. Cap. H.	£50,000	Special Plant	£ -
Creditors	19,000	Other Assets	76,500
Rev. A/c	10,500	<u>Goodwill - Net C. of C. of S to the group</u>	
Divisible		Adjusted Cost	£23,000
Gen. Res. £1,000		Less: Cap. Res.	Nil
P. & L. A/c <u>9,500</u>			£23,000
		Par value	20,000
			3,000
	<u>£79,500</u>		<u>£79,500</u>

Notes: (1) The /

Notes: (1) The Net Cost of Control of S. is increasing each year and reaches its maximum in the 6th year when the Special Plant is disposed of. It would have remained constant at £2,600 each year if the holding company in its financial books had written down the "Investment in S. £23,000" by depreciation at 25% per annum on the plant valuation difference thus:-

Valuation difference at acquisition date . . .	£400	
1st yr. depn. @ 25%	£100	<u>100</u>
		£300
2nd yr. depn. @ 25%	<u>75</u>	<u>75</u>
	£175	£225

Addn. to Net C. of C. at end of 2nd yr.
as H. has not w/d "Investment in
Subsidiary" by that amount:

etc.

Nil

Addn. to Net C. of C. of S. at end of 6th
yr. as H. has not w/d Investment in Sub-
sidiary by that amount. £400

(2) It should be observed that in the above three Consolidated Statements, the Group Profit and Loss Account is absolutely in line with the members' divisible profits. This feature is of paramount importance. It is emphasised that, although in theory the holding company should have provided for depreciation on the plant re-valuation difference by debiting Profit and Loss Account and crediting "Investment in Subsidiary" by £100 at the end of the 1st yr., a further £75 at the end of the 2nd yr. and so on, this aspect of the matter doesnot give the clue to the treatment in the Consolidated Statement. During the preparation of the Consolidated Statement, the depreciation on the valuation difference should not be debited to Group Revenue Account and credited to Plant Account for this would result in the Group Revenue Account being charged with a sum which may never be written off in the financial books of either member and so the Group Revenue Account would become increasingly out of line with divisible profits as shown by the members' Accounts. This must be avoided.

The question may well be asked - what is the usual reason for an under-valuation of a fixed asset in the financial books of a subsidiary which is being acquired by a holding company? The answer to this may be that the subsidiary in the past has been writing off large sums as depreciation and this answer leads on to a study of the case where, if this conservative depreciation policy is continued by the subsidiary after acquisition there is a combination of (a) excessive depreciation written off in the subsidiary's financial books after acquisition date and (b) an under-valuation in the financial books of the subsidiary of the relative asset as at the date the shares were acquired by the holding company. In subsequent Consolidated Statements these two matters, although intimately connected from a practical point of view, should be treated separately, each according to the principles already outlined. The rate of depreciation used each year to reduce the Capital Reserve which represents the under-valuation, is the rate adopted by the group as the adequate rate.

Illustration 6. Under-valuation of Plant of a subsidiary at acquisition date. Excessive depreciation written off in the financial books of the subsidiary after acquisition.

Facts as in illustration 5 except that the group considered that the 25% depreciation rate on the Special Plant was excessive and determined that 20% per annum was adequate for consolidation purposes (S. however continued to write off 25% in its financial books).

Solution: The position of the Special Plant (book value) is the same as in illustration 3 to which reference should be made.

The Consolidated Statement at acquisition date and that on the date 6 years later are obviously the same as these in illustration 5.

The Consolidated Statement 2 years after acquisition is different due to the adjustment required for excessive depreciation. The consolidated adjustment required in S's. accounts 2 years after acquisition are:

S.1. /

s.1. Special Plant Account Dr. £256
 To Capital Reserve £256

(Being present under-valuation of Special Plant i.e. under-valuation @400 at acquisition date less depreciation at 20% - the rate adopted by the group - for 2 years thus:-

Under-valuation at acquisition date £400
Less: Depn. at 20% p.a. for 2 yrs. (80 + 64) 144
£256

s.2. Special Plant Account Dr. £ 77
 To Rev. A/c (Special Reserve Account) £ 77

(Being adjustment for excessive depn. w/o from the book value of S's. Plant since acqn. date - the difference between 25% (rate in books) and 20% (reqd. rate) for 2 years - See illn. 3 for details).

The Aggregation of the adjusted Balance Sheets is omitted - details shown in the Consolidated Statement.

The Consolidated Statement of Assets and Liabilities 2 years after acquisition is:

<u>Liabilities</u>	<u>Assets</u>
Sh. Cap. H. £50,000	Special Plant per S's. B/S £563
Creditors 24,000	<u>Add:</u> Excessive depn. (S.2) w/o in books <u>77</u>
Rev. A/c £9,000 + 77 (S2) 9,077	£640
Divisible	<u>Add:</u> Present undervaln. (S1) <u>256</u>
Gen. Res. £1000	£896
P. & L. A/c 8000	Other Assets 79,437
Spec. Res. created from depn. w/o in the fin. A/cs of a member in excess of group requirements. <u>77</u>	<u>Goodwill Net C. of C. of S. to the group.</u>
	Adjusted Cost £23,000
	<u>Less:</u> Cap. Res. <u>256</u>
	£22,744
	Par value <u>20,000</u> 2,744
<u>£83,077</u>	<u>£83,077</u>

Notes (1) It should be observed that the value of Special Plant is now £896. Although this represents the re-valn. fig. at acqn. date £1400, less 2 years' depn. at 20% (280 + 224) the treatment of the asset is in two distinct stages. Firstly to adjust the excessive depn. on the book value of the asset (S2) and secondly to add the current undervaln. (S1)

(2) As in the preceding illn. the Net C. of C. is increasing as the years progress. (£2600 at acqn. date, £2744 two /

two years later and £3,000 six years later). It would have remained constant at £2600 if H. in its financial books had written down the value of "Investment in Subsidiary" by depreciation at 20% on the plant valuation difference thus:

Valn. difference	£400		⌘ Note re obsoles. in 6th yr. £131.
1st year's depn. at 20% . . .	£80	<u>80</u>	Although the Plant was sold for £100 the full £100 was put against the book value of the plant (see illn. 3) so that so far as the valn. dif. is concerned at the end of the 5th yr. (£131), there is no offset of any part of the sale price.
		£320	
2nd " " " " . . .	<u>64</u>	64	
Addn. to Net C. of C. at end of 2nd yr. as H. has not w/d Investment by S. by that amt.	£144	—	
		£256	
3rd year's depn. at 20% . . .	51	<u>51</u>	
		£205	
4th " " " " . . .	41	<u>41</u>	
		£164	
5th " " " " . . .	33	<u>33</u>	
		<u>£131</u>	
6th " obsolescence . . .	<u>131</u>		⌘
Addn. to Net C. of C. at end of 6th yr. as H. has not w/d Investment in S. by that amt.	£400		

- (3) The Consolidated Statement shows the adjustment for excessive depreciation as a Special Reserve in order to keep the Group Profit and Loss Account and General Reserve in line with divisible profits of the members.

Over-valuations in Subsidiary's financial books.

If the adjustment required for an under-valuation has been understood, the treatment in the Consolidated Statement in respect of an over-valuation should be fairly obvious. The subsidiary has a portion of an Asset (the valuation difference) which portion is ignored altogether by the group and is therefore not shown in the Consolidated Statement. If the asset is being depreciated each year by the subsidiary then the amount of the over-valuation will decrease /

decrease annually and the adjusting consolidation entry (Dr. Cap. Res. A/c; Cr. Asset A/c) will decrease in amount each year. As the Capital Reserve is at a later stage of consolidation transferred to Net Cost of Control the effect of a decreasing Capital Reserve (cr. balance) will be to reduce the final Net Cost of Control figure assuming it is a debit balance.

When the asset is sold or scrapped, no adjustment is possible in the Consolidated Statement and the Net Cost of Control figure will then have decreased by the full amount of the over-valuation of the asset. The position here is that in the financial books of the subsidiary, an asset has been written off from profits and a portion of that asset (the valuation difference) has always been ignored by the group since the valuation difference was a capital loss provided for in the price paid for the shares. In order to prevent Group Revenue Account becoming out of line with the divisible profits of the members, the group revenue must be left charged with depreciation on the higher valuation of the asset, and since only the lower asset valuation is available to the group to charge with depreciation, the depreciation on the valuation difference is in effect, used to write down the Net Cost of Control figure.

Illustration 7. Over-valuation of Plant of a subsidiary at acquisition date. Treatment of depreciation on the valuation difference.

Facts as in illustration 5 except that H, when purchasing S's shares, considered that S's. Special Plant (book value £1,000) was worth only £600.

Solution; The net worth of S. (excluding Goodwill) as valued by H. at acquisition date is £19,600 thus:-

Special Plant re-valued	£600
Other Assets	<u>25,000</u>
	£25,600
<u>Less: Creditors</u>	<u>6,000</u>
Net Worth (excluding value of Goodwill)	<u>£19,600</u>

As H. gave £23,000 for all S's. shares, S's. hidden Goodwill at acquisition /

6 years later

As per illustration 5.

Notes: (1) The Net C. of C. figure is decreasing as the years pass (£3,400, £3,225, £3,000), but reaches its minimum in the 6th year when the Special Plant was disposed of. P. & L. A/c in S's. financial books has borne depreciation over the six years on the higher valuation of plant £1,000. In total S's. revenue has therefore been charged with depreciation and obsolescence of £900 (£1,000 - £100 sale price). In the Consolidated Statement the plant written off was valued originally by the group at £600. But Group Revenue in the Consolidated Statement has been left to agree throughout with divisible profits of the members. Group Revenue has therefore been charged with £900 depreciation and obsolescence over the six years and accordingly the valuation difference which has been debited to revenue is, in effect, used to write down the Net C. of C. figure in the Consolidated Statement.

If a fixed asset of a subsidiary is found to be over-valued at the date the holding company acquires control of the subsidiary, the reason may well be that insufficient depreciation has been written off in the past. The holding company may decide that for consolidation purposes, a higher rate will apply in the future. It is appreciated that as the holding company controls the subsidiary, this higher rate may in fact be written off by the subsidiary in its future annual Accounts but this ideal state of affairs is not always found in practice. In the preparation of a Consolidated Statement one may sometimes have to deal with a combination of (a) inadequate depreciation written off in the financial books of the subsidiary after acquisition and (b) an over-valuation in the financial books of the subsidiary, of the relative asset as at the date that the shares were acquired. These two matters should be kept quite apart and each treated according to the principles already outlined.

Illustration 8. Over-valuation of Plant of a subsidiary at acquisition date. Inadequate depreciation written off in the financial books of the subsidiary after acquisition.

Facts as per illustration 7, except that the group considered

that /

that the 25% depreciation rate on the Special Plant was inadequate and determined that $33\frac{1}{3}\%$ should be written off for consolidation purposes.

Solution: The position of the book value of the Special Plant is the same as in illn. 1, to which reference should be made.

The Consolidated Statement at acquisition date and that on the date six years later are obviously the same as those prepared in illn. 7.

The Consolidated Statement two years after acquisition is different due to the adjustment required for inadequate depreciation.

The Consolidation adjustments in S's. Accounts two years after acquisition are:

S. 1. Cap. Res. A/c Dr. £178
 To Special Plant A/c £178

(Being present over-valn. of Special Plant i.e. over-valn. £400 at acqn. date less 2 years' depn. at $33\frac{1}{3}\%$ - the rate determined by the group - thus:-

Over-valn. at acqn. date £400
 Less: Depn. at $33\frac{1}{3}\%$ for 2 yrs. ($133 + 89$) 222 178

S. 2. Rev. A/c (Gen. Res) Dr. £118
 To Special Plant A/c £118

(Being adjustment for inadequate depreciation written off from the book value of S's. Plant since acquisition date - the difference between 25% (rate in books) and $33\frac{1}{3}\%$ (reqd. rate) for 2 yrs. See illn. 1 for details).

The aggregation of the adjusted Balance Sheets is omitted - details shown on the Consolidated Statement.

The Consolidated Statement of Assets and Liabilities 2 years after acquisition is:

<u>Liabilities</u>	<u>Assets</u>
Sh. Cap. H. £50,000	Special Plant 563 - 118 . . . £445
Creditors 24,000	Less: Present overvaln. (S 1.) 178
Rev. A/c (9000 - 118 S 2.) 8,882	£267
Divisible	Other Assets 79,437
Gen. Res. (1000 - 118)	<u>Goodwill Net C. of C. of</u>
P. & L. A/c £ 882	<u>S to the group.</u>
	Adjusted Cost . . £23,000
	Add: Cap. Res. dr. 178
	bal. S 1. 178
	Par value . . £23,178
	20,000 3,178
Notes /	£82,882 £82,882

- Notes (1) It should be observed that the value of the Special Plant is now £267. Although this is the revaluation figure at acquisition date £600 less 2 years' depreciation at $33\frac{1}{2}\%$ ($200 + 133$) the treatment of the asset is in two distinct stages. Firstly to adjust for the inadequate depreciation on the book value of the asset (£ 2) and secondly to deduct the current overvaln. (£ 1).
- (2) The adjustment for inadequate depreciation debited to Group Revenue Account is, in the division of the Revenue Account between General Reserve and Profit and Loss Account, charged to General Reserve if one exists. By doing so, Group Profit and Loss Account is kept in line with the Profit and Loss Account balances as shown in members' A/cs.
- (3) As the years pass, the inadequate depreciation eventually disappears - at latest when the asset is sold or scrapped. In the above example this happens at the end of the 6th year.

In a review of the treatment of depreciation on the revaluation difference of a fixed asset of a subsidiary, it will be noted from the last 4 illustrations, that in the case of either an overvaluation or undervaluation, the revaluation difference eventually finds its way to the Net Cost of Control figure. It is included there in total when the asset ceases to exist. One might perhaps wonder whether the adjustments made during the life of the asset are worth while. If they are ignored, the revaluation difference will appear under Net Cost of Control in all Consolidated Statements prepared throughout the entire period. It is pointed out, however, that the life of an asset may cover a long period of years and adjustments for revaluation have the effect of disclosing throughout a truer value of the fixed assets to the group. Further the Consolidated Statement prepared immediately after acquisition will disclose the exact amount paid for the hidden Goodwill of the subsidiary and as regards Consolidated Statement thereafter, this position can often be maintained. The matter is entirely in the hands of the controllers of the group. It has already been shown that in the case of an undervaluation in the subsidiary's financial books the Net Cost of Control of the subsidiary can be restored to represent only the hidden Goodwill of the subsidiary at all times, if action is taken /

taken by the holding company in its financial books to write down from its own profits (or from dividends received from the subsidiary), the value of "Investment in Subsidiary" by adequate depreciation to date on the amount of the valuation difference.

The position in the case of an overvaluation in the subsidiary's financial books is not so easily rectified but it can be done where the subsidiary has a sufficient pre-acquisition credit balance on Revenue Account for there appears to be no objection to -

- (a) Consolidation adjustment: the group in determining the amount of the pre-acquisition revenue balance adjustment, setting off the over-valuation difference against and up to the amount of any pre-acquisition revenue credit balance. The pre-acquisition revenue balance adjustment at any particular date (Dr. Holding Company's Profit and Loss Account; Cr. Investment Account) would then be made with the restricted balance.
- (b) Adjustment in financial books: the holding company so far as its financial books are concerned, crediting to revenue, dividends received from the subsidiary even although they are paid out of the pre-acquisition fund of profits but only up to the amount of the over-valuation difference.

provided that in both (a) and (b) the amount set off and credited respectively at any date is never allowed to exceed the aggregate amount of the depreciation actually written off by the subsidiary on the over-valuation difference.

This perfectly sound procedure rectifies the otherwise unfortunate position of the group and the holding company both losing revenue from the subsidiary owing to the subsidiary writing off depreciation on the over-valuation difference which was already written off in the price paid for the subsidiary's shares. Where the pre-acquisition balance is a debit balance, there appears to be no remedy.

A summary of the conclusions reached on the treatment of a re-valuation /

re-valuation of Fixed Assets which are depreciating, is given:

- (1) For both over-valuations and under-valuations in a subsidiary's financial books.

Adjustments made to prepare the Consolidated Statement.

- (i) At the date the holding company acquired the shares in the Subsidiary.

Write up or write down as the case may be, the asset to its true value, the corresponding entry being made to Capital Reserve Account. At a later stage of consolidation, the Capital Reserve is transferred to Net Cost of Control and thus the figure for Net Cost of Control in the Consolidated Statement is the true hidden Goodwill of the subsidiary at cost to the group.

- (ii) At subsequent consolidation dates if asset is still in use.

As for (i) except that the amount of the adjusting entry will be decreased in each consecutive year by depreciation on the valuation difference at the rate adopted by the group. This has the effect of altering the Net Cost of Control figure in the Consolidated Statement.

- (iii) At the date the asset is sold or scrapped and thereafter.

No adjustment possible. The valuation difference in toto will now appear under the Net Cost of Control figure in the Consolidated Statement.

- (2) Possible corrective measures available in order to keep the Net Cost of Control figure at the same amount in all Consolidated Statements prepared.

Under-valuation only. The holding company has paid for the valuation difference, and as the subsidiary is not writing down on that difference, the onus of providing for depreciation is transferred to the holding company. In the holding company's financial books the "Investment in Subsidiary" should be written down from profits each year by depreciation on the valuation difference. If this is done annually the Net Cost of Control of the subsidiary will remain at the same figure in all Consolidated Statements. If it is not done, the Net Cost of Control (assuming /

(assuming it is a debit balance) will increase each year and eventually when the asset is non-existent, the total valuation difference at acquisition date will be included in the Net Cost of Control figure (see illustration 9).

(See note below and illustration 9 for an alternative corrective method available only in exceptional cases where the subsidiary has a debit balance on Profit and Loss Account at acquisition date).

Over-valuation only. The subsidiary is writing off depreciation on a higher assets figure than is recognised by the group. The Net Cost of Control figure, assuming it is a debit balance will decrease each year. This can be corrected in the preparation of the Consolidated Statement provided the subsidiary has a sufficient pre-acquisition credit balance on Revenue Account. The correction is made by a reduction of the figure used for the pre-acquisition revenue balance adjustment by the amount of depreciation to date on the valuation difference. (Similarly, the holding company in its financial books is able to credit to revenue dividends or portions of dividends received although these are paid out of the pre-acquisition fund, but only to the extent of the amount of depreciation written off to date on the over-valuation difference).

Note: In consolidation procedure, the above corrective measure used for over-valuations where the subsidiary has a sufficient pre-acquisition credit balance, is also applicable in the case of an under-valuation provided the subsidiary has a sufficient debit pre-acquisition Profit and Loss balance. The amount of the consolidation adjustment each year (Dr. Investment Account; Cr. Revenue Account when the accounts of the holding company are being adjusted) may be restricted by the amount of depreciation to date on the valuation difference. It will be uncommon in practice to find these two essential conditions existing concurrently and so this corrective procedure will only be available in the exceptional case (see illustration 9).

Illustration 9 /

Illustration 9.

Under-valuation of Plant of subsidiary at acquisition date.

Subsidiary with debit balance on Revenue Account at acquisition date. Demonstration of two methods of corrective procedure to maintain Net Cost of Control of subsidiary at the same figure in all Consolidated Statements.

H. acquired all S's. shares for £23,000. H. considered S's. plant under-valued by £400 at acquisition date. The Balance Sheets of S. at acquisition date and two years later were:

	<u>Liabilities</u>	<u>At acqn. date</u>	<u>2 yrs. later</u>	<u>Assets</u>	<u>At acqn. date</u>	<u>2 yrs. later</u>
Sh. Cap. (in £1 shs.)	£20,000	£20,000	Plant less depn. at 25% p.a.	£1,000	£563	
Creditors	6,000	8,000	Other assets	24,300	28,437	
P. & L. A/c	_____	1,000	P. & L. A/c	700	_____	
	<u>£26,000</u>	<u>£29,000</u>		<u>£26,000</u>	<u>£29,000</u>	

H's. Balance Sheets at the above dates were the same as in illustration 5.

Solution: At the acquisition date, the adjustments required in each company's accounts for the preparation of a Consolidated Statement are:

S 1. Plant A/c	Dr. £400	
To Cap. Res.		£400
(Being under-valuation of S's. Plant at the date H. acquired control of S.)		
H 1. Investment A/c (in S)	Dr. £700	
To Rev. A/c		£700
(Being S's. dr. bal. on Rev. A/c at acqn. date - pre-acqn. when H. bought 20,000 shs. in S).		

The aggregation of the adjusted Balance Sheets is not given - details shown on the Consolidated Statement.

The Consolidated Statement of Assets and Liabilities as at the acquisition date is:

Liabilities /

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H.	£50,000	Plant (1000 + 400 s 1)	£1,400
Creditors (15,000 + 6000)	21,000	Other Assets (52,000 + 24,300)	76,300
Rev. A/c (H. £10,000 + S. 700 - 700)	10,000	<u>Goodwill Net C. of C. of S. to the group</u>	
Divisible		Adjusted Cost (23,000 + 700)	
Gen. Res.	£1,000		£23,700
P. & L. A/c	<u>9,000</u>	<u>Less: Cap. Res.</u>	<u>400</u>
			£23,300
		Par value	<u>20,000</u>
			3,300
	<u>£81,000</u>		<u>£81,000</u>

2 years later

1st Corrective method. This corrective method cannot be carried out during the process of consolidation. It demands that action be taken by the holding company in its financial books. H., in its financial books, writes down the asset "Investment in S. £23,000" by the amount of depreciation at 25% on the valuation difference £400. H's. Balance Sheet is therefore amended thus: Investment in S. is £22,825 {23,000 less £(100 + 75) } and Profit and Loss Account balance is £6,825 {7,000 - £(100 + 75) }.

The adjustments required in each company's accounts for the preparation of a Consolidated Statement two years later are:-

S 1. Plant A/c Dr. £225
 To Cap. Res. £225

(Being current under-valuation of S's. Plant i.e. under-valuation at acquisition date £400 less 2 years' depreciation at 25% per annum).

H 1. Investment A/c(in S) Dr. £700
 To Rev. A/c £700

(Being S's. debit balance on Revenue Account at acquisition date - pre-acquisition when H. bought 20,000 shares in S).

The Aggregation of the adjusted Balance Sheets is not given - details shown on the Consolidated Statement.

The /

The Consolidated Statement of Assets and Liabilities two years after acquisition is:

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H.	£50,000	Plant (£563 + 225 s 1)	£788
Creditors (16,000 + 8000)	24,000	Other Assets (51,000 + 28,437)	79,437
Rev. A/c (7,825 + 700) + 1000	9,525	<u>Goodwill: Net C. of C. of S. to the group</u>	
		Adjusted Cost (22,825 + 700)	
Divisible		£23,525	
Gen. Res. £1,700		<u>Less: Cap. Res. 225</u>	
P. & L. A/c <u>7,825</u>		£23,300	
		Par value	<u>20,000</u> 3,300
	<u>£83,525</u>		<u>£83,525</u>

Notes: (1) The Group P. & L. A/c balance £7825 is made to agree with the divisible profits as shown in the members' accounts. (6825 + 1000) by a transfer to Group General Reserve of the profit made by S. since acquisition to the extent it has been used to reduce the debit balance on Profit and Loss Account £700, at acquisition date. It is always prudent to make this transfer for, although the subsidiary has earned at least £1700 of profit since acquisition, only £1000 of this is available for dividend paying. *normally*

(2) By the action taken by H. in its financial books in writing down the value of "Investment in Subsidiary", the Net Cost of Control figure in the above Consolidated Statement remains at £3300, the true hidden Goodwill of S. at acquisition date.

2nd Corrective method. This method is carried out during the process of consolidation, but it is only available when the subsidiary has a debit balance on Profit and Loss Account at acquisition date. The facts differ in this case. As regards depreciation on the valuation difference H. has taken no action in its financial books so that "Investment in subsidiary" remains at cost £23,000 and H's. Balance Sheet two years after acquisition of S. is therefore per illustration 5.

S's. debit balance on Profit and Loss Account at acquisition date /

date (£700 debit) has been wiped out by subsequent profits for S. has now a credit balance of £1,000 available for dividend paying. S. has earned £1,700 since acquisition for the group, but only £1,000 is available for dividend paying; the balance of £700 is "frozen". Because of this feature, one can maintain the Net Cost of Control of S. at £3,300 in the current Consolidated Statement despite depreciation on the valuation difference, by adopting the corrective procedure of restricting the amount of the pre-acquisition debit balance of S. to be capitalised. The restriction made is the amount of depreciation to date on the valuation difference. The adjustments to be made in each company's accounts for preparation of the Consolidated Statement two years after acquisition are therefore:

S 1. Plant A/c Dr. £225
 To Cap. Res. £225
 (Being current under-valuation of S's. Plant i.e. under-valuation at acquisition date £400 less two years' depreciation at 25% p.a.)

H 1. Investment A/c (in S.) Dr. £525
 To Rev. A/c £525
 (Being S's. debit balance on Revenue Account at acquisition date £700 - pre-acquisition - when H. bought 20,000 shares in S., the £700 being restricted by depreciation for 2 years at 25% on the under-valuation difference, £400, i.e. by £100 + 75 = £175).

The Aggregation of the adequate Balance Sheet is not given.

Details shown in the Consolidated Statement.

The Consolidated Statement of Assets and Liabilities two years after acquisition is:-

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H.	£50,000	Plant (563 + 225 S 1.) . . .	£788
Creditors (16,000 + 8,000)	24,000	Other Assets (51,000 + 28,437)	79,437
Rev. A/c (8000 + 525) + 1000	9,525	<u>Goodwill - Net C. of C. of S. to the Group.</u>	
Divisible		Adjusted cost (23,000 + 525)	
Gen. Res.	£1525	£23,525	
P. & L. A/c	<u>8000</u>	Less: Cap. Res.	<u>225</u>
		£23,300	
		Par value	<u>20,000</u>
			3,300
	<u>£83,525</u>		<u>£ 83,525</u>

Notes: /

Notes: (1) The above Consolidated Statement is the same as that prepared under the 1st corrective method except in the sub-division of Revenue Account. In the above Group, Profit and Loss Account £8,000 agrees with divisible profits as shown by the members' Profit and Loss Accounts (H. £7000; S. £1000). The same principle was adopted in the previous Consolidated Statement but the members' Profit and Loss Account figures were H. £6825; S. £1000.

(2) This corrective method is only available in special circumstances, i.e. where there is an under-valuation and the subsidiary has a debit balance on Profit and Loss Account, both at acquisition date.

CHAPTER V. The Partly-owned Subsidiary - Minority Interests.

A partly-owned subsidiary exists when a group does not acquire all the shares of a subsidiary. Some of the shareholders may not agree to sell out to the holding company or the holding company, perhaps to conserve its limited liquid resources, may desire only a holding sufficient to control the subsidiary for all practical purposes. The acquisition of anything over 50% of the voting power substantially gives this control, but unless at least 75% of the voting capital is held, the holding company, acting alone, does not have the power to control the vote on any matter which requires a $\frac{3}{4}$ ths majority (a special resolution).

In the preparation of a Consolidated Statement of Assets and Liabilities, provision must be made for the interests of these shareholders who are outside the group. This is done by the introduction of the heading "Minority Interests" on the liability side of the Statement. What does this heading cover? It will include the nominal value of all shares (of a subsidiary) held by outsiders and in the case of Ordinary Shares there will be added a proportionate share of Capital Reserve, General Reserve and the credit balance on Profit and Loss Account of the subsidiary - a debit balance on the last account would form a deduction. In the general case of Preference Shares there will only be added the unpaid preference dividend to date, provided there are sufficient profits to meet it. The heading "Minority Interests" is thus a composite figure, made up of Capital and Revenue items, and it represents the outside shareholders' proportion of the Net Assets of the subsidiary.

The procedure to be adopted in the preparation of a Consolidated Statement is to adjust each member's Balance Sheet for contra items, pre-acquisition revenue balances affecting the book value of shares held, re-valuation of Assets, depreciation, stock reserves etc., on the same principles ^{as} already outlined, and arrive at the aggregation of the adjusted Balance Sheets. In preparing the Consolidated Statement /

statement from the aggregation, one then gives consideration to the extent the subsidiary is owned, and the Minority Interests are allocated the appropriate share of the subsidiary in respect of (a) Share Capital (b) Revenue balances (credit or debit) and (c) Capital Reserve (credit or debit).

The balance of these accounts belongs to the holding company and is dealt with as in the case of a fully-owned subsidiary.

Adjustment of the Book Value of Investment in Subsidiary.

The holding company's balance sheet is adjusted as before so that shares in the subsidiary are valued "at cost, adjusted for pre-acquisition revenue balances," i.e. at "Adjusted Cost." As the subsidiary is only partly owned the appropriate proportion of the pre-acquisition revenue balance is taken for the adjustment.

Ex. 11.

Adjustment of Book Value of Investments in a Partly-owned Subsidiary.

The summarised Balance Sheets of a group as at 31st December, 1946, are:

	<u>Liabilities</u>	<u>H.</u>	<u>S.</u>	<u>Assets</u>	<u>H.</u>	<u>S.</u>
Sh.Cap.(in £1 Ord.Shs.)	£100,000	£20,000		Sundry Assets .	£108,150	£30,000
Creditors	10,000	4,000		Goodwill at cost	1,000	4,500
General Reserve	9,000	3,500		Invest. in S. at cost -		
P. & Loss A/c	13,000	7,000		15,000 Ord. Shs.	22,850	
		<u>£132,000</u>	<u>£34,500</u>		<u>£132,000</u>	<u>£34,500</u>

H. acquired 15,000 shares in S. ($\frac{3}{4}$ ths) in 1939 when S. had a General Reserve of £2,000 and a credit balance on Profit and Loss Account of £8,000 (estimated).

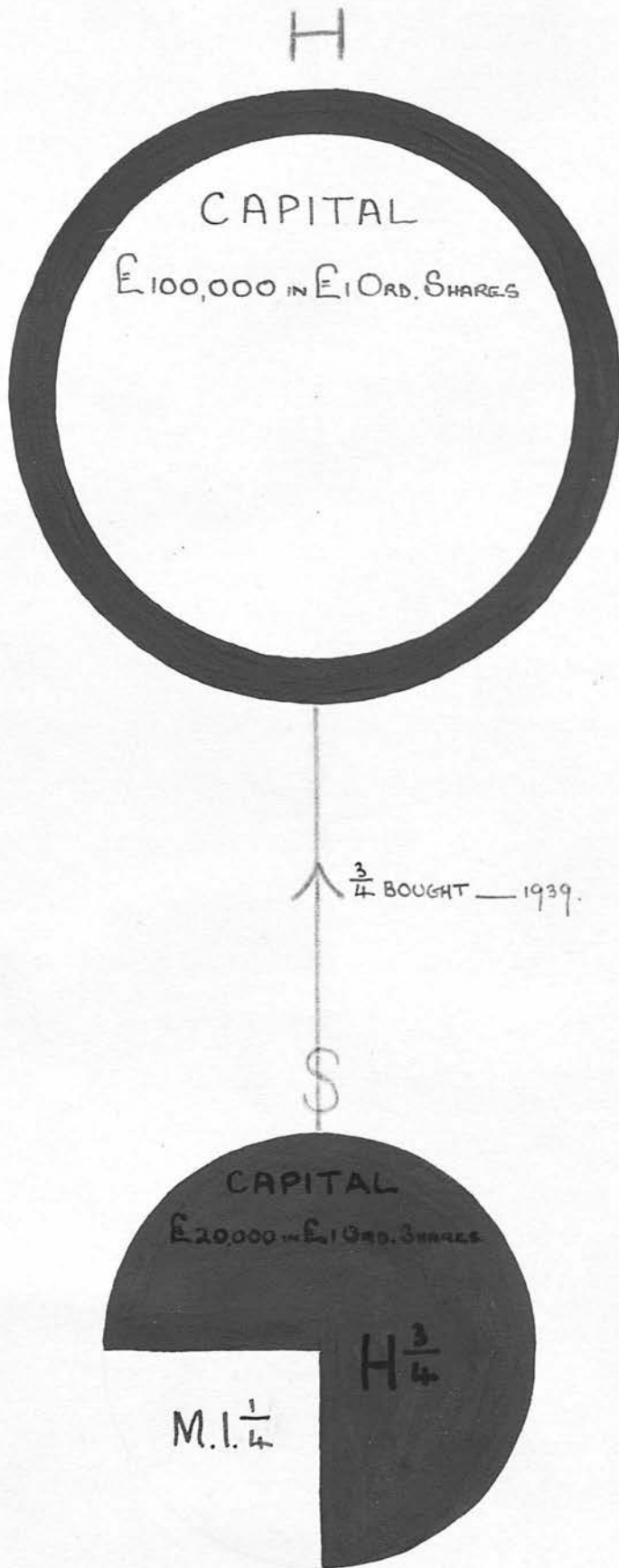
Solution: (a) The adjustment required in H's. account is:

H (1) Revenue A/c Dr. £7,500
 To Investment A/c (in S.) £7,500

(Being $\frac{3}{4}$ ths of S's. balance on Rev. A/cs (pre-acqn.) in 1939 - Gen. Res. £2,000, P. & L. A/c £8,000 - when H. bought 15,000 shares in S. ($\frac{3}{4}$ ths)

(b) /

EXAMPLES — 11 and 39



(b) The aggregation of the adjusted Balance Sheets is:

<u>Liabilities</u>			<u>Assets</u>		
<u>Total</u>	<u>H.</u>	<u>S.</u>	<u>Total</u>	<u>H.</u>	<u>S.</u>
Capital £120,000	£100,000	£20,000	Sundry Assets £138,150	£108,150	£30,000
Creditors 14,000	10,000	4,000	Goodwill at cost 5,500	1,000	4,500
Rev. A/c 25,000	14,500	10,500	Invest. in S. at Adjusted cost. 15,000	Ord. Shs. 15,350	15,350
<u>£159,000</u>	<u>£124,500</u>	<u>£34,500</u>	<u>£159,000</u>	<u>£124,500</u>	<u>£34,500</u>

(c) Consideration is now given to the extent S. is owned by the group. The Consolidated Statement is:-

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H.	£100,000	Sundry Assets	£138,150
Creditors	14,000	Goodwill per Balance Sheets	5,500
Rev. A/c	£25,000	" <u>Net C. of C. to the group</u>	
Less: M.I. S. $\frac{1}{4}$ of (3500 + 7000)	<u>2,625</u>	Adjusted Cost S. $\frac{3}{4}$ ths	£15,350
Min. Ints. S $\frac{1}{4}$		Par	<u>15,000</u> 350
Capital	£5,000		
Rev. A/c	<u>2,625</u>		
	<u>£144,000</u>		<u>£144,000</u>

Notes: (1) The adjustment debits H's. Rev. A/c with $\frac{3}{4}$ ths of S's. pre-acquisition revenue balances, but H. eventually receives only $\frac{3}{4}$ ths of S's. current Revenue Balances - the Minority Interests being allocated $\frac{1}{4}$ (£2625)
 (2) For the final Consolidated Statement, Revenue A/c £22,375 may be split between General Reserve and Profit and Loss Account. The mathematical calculation of the amount transferable to General Reserve is:

$$\begin{aligned} \text{General Reserve} &= \text{H's.} + \frac{3}{4} \text{ths of S's. created since acquisition.} \\ &= 9000 + \frac{3}{4} \text{ths of } (3500 - 2000) \\ &= 10,125 \end{aligned}$$

The sub-division of Rev. A/c is therefore Gen. Res. £10,125

P. & L. A/c	<u>12,250</u>
	<u>£22,375</u>

(3) As "Investment in S" is stated at cost in H's. financial books, all dividends received by H. from S. have been considered by H. as having been paid out of post-acquisition earnings of S. The pre-acquisition balance £10,000 (Gen. Res. £2,000 and Profit & Loss A/c £8000) is regarded as still lying in S's. Balance Sheet at 31st December 1946. (Gen. Res. £3,500 and Profit & Loss A/c £7,000 together £10,500).

Depreciation adjustments and revaluation of Fixed Assets

Any re-valuation of assets of the subsidiary made when control is acquired is treated in same way whether the subsidiary is fully or partly-owned by the adjustment of the book value of the asset to its true value and a corresponding credit (where Assets are written up) or debit (where assets are written down) to a Capital Reserve Account. After the adjusted Balance Sheets are aggregated, there is then allocated to the Minority Interests ~~are then allocated~~ their relative share of the Capital Reserve Account (credit or debit), and of the adjusted Revenue Account balance where there have been depreciation adjustments.

Ex. 12.

Inadequate Depreciation Adjustments: over-valuation of Fixed Assets: Partly-owned Subsidiary.

The summarised Balance Sheets of a group as at 31st December, 1945, were:

	H.	S.	Assets	H.	S.
Sh.Cap.(in £1 Ord.Shs.)	£100,000	£20,000	Property at cost	£22,500	£11,500
Creditors	10,000	4,000	Plant at cost less depn. at 10%	16,000	
Profit & Loss A/c . . .	5,000	1,500	Plant at cost less depn. at 7½%		4,625
Gen. Res.		1,000	Goodwill at cost		4,000
			Invest. in S. at cost (16,000 shs.)	18,000	
			Sundry Assets . .	58,500	6,375
	<u>£115,000</u>	<u>£26,500</u>		<u>£115,000</u>	<u>£26,500</u>

Notes: (1) H. acquired 16,000 Ord. Shs. in S. ($\frac{4}{5}$ ths) on 31st Dec. 1944 when S. had a credit balance on Profit & Loss A/c of £250 and on Gen. Res. of £750.

(2) On acquisition date H. considered S's. Property was over-valued by £1,000. S's. books were not adjusted for this.

(3) For consolidation purposes depreciation has to be standardised in both members' accounts. The agreed rate for plant is 10% p.a. on the written down value. At 31st Dec. 1944 H. considered S's. Plant (book value £5,000) as fairly valued.

solution: (a) The adjustments required in each Company's A/cs are:

S (1) Capital Reserve Dr. £1,000
 To Property A/c £1,000

(Being amount written off S's. Property to reduce it to the re-valuation figure at 31st Dec. 1944 when H. acquired control of S.)

S (2) Revenue A/c (Gen. Res.) Dr. £ 125
 To Plant A/c £ 125

(Being inadequate depreciation provided for in S's. financial books since the date H. acquired control of S. i.e. for year to 31/12/45, thus:

	<u>Fin. Bks. 7½%</u>	<u>Consd. St.^t 10%</u>
Value at 31/12/44 (acqn. date) . . .	£5,000	£5,000
Depn. for 1945	<u>375</u>	<u>500 (dif. £125)</u>
As at 31/12/45	<u>£4,625</u>	<u>£4,500</u>

H (1) Revenue A/c Dr. £ 800
 To Investment A/c (in S.) £ 800
 (Being ⁴/₅ths S's. cr. bal. on Rev. A/c (P. & L. A/c and Gen. Res.) on 31/12/44 £1,000 - pre-acqn. when H. acquired 16,000 shs. in S. (⁴/₅ths).

(b) The Aggregation of the adjusted Balance Sheets is:

<u>Liabilities</u>			<u>Assets</u>				
<u>Total</u>	<u>H.</u>	<u>S.</u>	<u>Total</u>	<u>H.</u>	<u>S.</u>		
Capital	£120,000	£100,000	£20,000	Property	£33,000	£22,500	£10,500
Creditors	14,000	10,000	4,000	Plant . . .	20,500	16,000	4,500
Rev. A/c	6,575	4,200	2,375	Goodwill per B/S . . .	4,000		4,000
				Sundry Assets	64,875	58,500	6,375
				Cap. Res. (dr. bal.)	1,000		1,000
				Invest. in S. at adjusted cost . . .	17,200	17,200	
<u>£140,575</u>	<u>£114,200</u>	<u>£26,375</u>		<u>£140,575</u>	<u>£114,200</u>	<u>£26,375</u>	

(c) The Consolidated Statement of Assets and Liabilities is:

Liabilities /

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H.	£100,000	Property at cost to group .	£33,000
Creditors	14,000	Plant at cost less depn. at 10% p.a.	20,500
Revenue A/c	£6,575	Goodwill per B/S	4,000
Less: Min. Ints. S. $\frac{1}{5}$ th of £2,375	<u>475</u>	Sundry Assets	64,875
	6,100	Cap. Res. (Dr. bal.)	£1,000
<u>Min. Ints. S. $\frac{1}{5}$th</u>		Min. Ints. $\frac{1}{5}$.	£200
Sh. Cap.	£4,000	H. $\frac{4}{5}$ ths	<u>800</u> <u>1,000</u>
Rev. A/c	<u>475</u>	Goodwill - Net C. of C. to Group	
Cap. Res. (dr. bal.)	<u>200</u>	Adjusted Cost	£17,200
	4,275	Add: Sh. of dr. bal. on Cap. Res. ($\frac{4}{5}$ ths)	<u>800</u>
			£18,000
		Par value	<u>16,000</u> <u>2,000</u>
	<u>£124,375</u>		<u>£124,375</u>

Notes: (1) The Cap. Res. created by the over-valn. of S's. Plant is a dr. bal. This is retained in S's. adjusted B/S and disposed of after the aggregation stage by an allocation to the Minority Interests of their appropriate share, and a transfer of the balance ($\frac{4}{5}$ ths) to Net Cost of Control.

(2) For the final Consolidated Statement the Group Rev. A/c should be split between Profit and Loss Account and General Reserve. In order to keep the Group Profit and Loss A/c in line with the divisible profits are shown by the members' financial accounts, the additional depreciation provided for, should be charged to Group Reserve Account.

Group Gen. Res.	$\frac{4}{5}$ of S's. Gen. Res. £1000	=	£800
	Less: $\frac{4}{5}$ of addn. depn. 125		<u>100</u>
		Group Gen. Res.	£700
Group P. & L. A/c			<u>5,400</u>
			<u>£6,100</u>

The group P. & L. A/c figure £5,400 is:

P. & L. A/c	H.	£5,000
" " "	S. £1500 $\frac{4}{5}$ ths	
	thereof £1,200	

Less: Pre-acqn. bal.		
	($\frac{4}{5}$ ths)	<u>800</u> <u>400</u>
		<u>£5,400</u>

(3) The valuation of Minority Interests £4,275 can be verified from an independent calculation of their rights according to the adjusted Balance Sheet of S. i.e. the original Balance Sheet adjusted for the re-valuation of Plant, and the depreciation adjustment thus:

S's. Adjusted Balance Sheet

Capital £20,000

Revenue A/c 2,375

£22,375

Less: Dr. bal. on Cap.

Res. 1,000

£21,375 Min. Ints. $\frac{1}{5}$ th = £4,275

Net Cost of Control "Hidden" Goodwill.

It is advocated that the Net Cost of Control of a partly-owned subsidiary, as brought out in the Consolidated Statement, should be the figure relative to the number of shares held by the holding company. If further shares are acquired at a later date, the Net Cost of Control figure will be altered. At all times it is shown in the Consolidated Statement at cost to the holding company to date. On this basis a Consolidated Statement does not attempt to bring out the total valuation of the Goodwill of the two members, but only the cost of the Goodwill of the subsidiary so far as it (the Goodwill) has been purchased by the group. Accordingly, the Minority Interests figure is exclusive of any "hidden" Goodwill, and is simply the relative share of the Net Worth of the subsidiary, as brought out in the adjusted Balance Sheet.

It might be contended that if the holding company is prepared to increase its offer for the shares in the subsidiary in respect of Goodwill undervalued or not appearing in the Balance Sheet of the subsidiary, Goodwill should be treated similar to a revaluation of Fixed Assets, and written up to its true value on the acquisition date, in which case the Minority Interests would share in a revaluation of Goodwill in the same way as they share in a revaluation of, say,
Property /

Property. Further, Goodwill in the Consolidated Statement would appear at a figure representing the full valuation of Goodwill of the subsidiary as at the acquisition date. This method is not recommended, as it leads to difficulties whenever a new acquisition of shares, however small, at a different price, is made by the holding company in the same subsidiary. In any event the alternative does not give a figure representing the full value of the Goodwill of the group, unless the Goodwill of the holding company is also computed on quite an unimportant date, and the Consolidated Statement adjusted accordingly. It is therefore considered that it is the better practice to show the Net Cost of Control at cost to date.

The distinction between the method of treating a re-valuation of assets and that of treating Goodwill arising from a part-acquisition of a subsidiary, should be carefully noted. In the Consolidated Statement it is obviously desirable to show Property, Plant, etc., as an aggregation of figures adjusted to true values and depreciated at the same rate for the same class of asset. The Minority Interests figure is affected by these adjustments. On the other hand with "hidden" Goodwill included in the cost of the shares acquired by the holding company the position is different as it is shown in the Consolidated Statement at cost to the holding company to date, and only so far as the shares have been acquired. The figure of Minority Interests of the subsidiary remains undisturbed in this case.

Anticipated Post-acquisition losses of a Partly-owned subsidiary during a Re-organisation Period.

Where a fully-owned subsidiary has capitalised losses during a re-organisation period which followed the purchase of its shares by the holding company in the Consolidated Statement there is a transfer to Net Cost of Control to the extent that such losses were anticipated by the holding company and adversely affected the purchase price of the shares (see pages IV(1)(2) and ex. 8). The position differs when the subsidiary is only partly-owned, since the Net Cost of Control of the /

(b) The Aggregation of the Adjusted Balance Sheets is:

	<u>Liabilities</u>			<u>Assets</u>			
	<u>Total</u>	<u>H.</u>	<u>S.</u>	<u>Total</u>	<u>H.</u>	<u>S.</u>	
Sh. Cap.	£120,000	£100,000	£20,000	Sundry Assets	£143,500	£112,000	£31,500
Loan from H.			5,000	Loan to S. . .		5,000	
Creditors	24,500	20,000	4,500	Invest. at Adjusted Cost			
Revenue A/c	19,100	13,600	5,500	18,000 shs. in S.	15,300	15,300	
				Cash	1,300	1,300	
				Cost of Re-organi- sation	3,500		3,500
	<u>£163,600</u>	<u>£133,600</u>	<u>£35,000</u>		<u>£163,600</u>	<u>£133,600</u>	<u>£35,000</u>

(c) The alternative Consolidated Statements are:

(1) No transfer made to "Cost of Re-organisation" (Recommended procedure).

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H.	£100,000	Sundry Assets	£143,500
Creditors	24,500	Cash	1,300
Cap. Res. - Net C. of C. of S.	2,700	Cost of Re-organisation not written off	3,500
Revenue A/c	£19,100	<u>Net Cost of Control of S.</u>	$\frac{9}{10}$ ths
<u>Less:</u>		Adjusted Cost	£15,300
Min. Ints. $\frac{1}{10}$ of £5,500	<u>550</u>	Par	<u>18,000</u>
Divisible thus:		To Cap. Res. Cr.	<u>2,700</u>
Group P. & L. A/c	£14,950		
" Gen. Res.	<u>3,600</u>		
<u>Min. Ints.</u>	$S \frac{1}{10}$ th		
Sh. Cap.	2,000		
Rev. A/c	<u>550</u>		
	<u>£148,300</u>		<u>£148,300</u>

Note: Group Profit and Loss Account is shown as £14,950 which is in line with the Profit and Loss Account of the members thus:-

H.	£10,000
S.	£5,500
<u>Less: Minority Interests</u>	<u>550</u>
	<u>4,950</u>
	<u>£14,950</u>

The transfer of £3,600 to Group General Reserve is the group's share of S's. debit balance at 1938 since wiped out by profits. It is revenue to the group which revenue is not available to distribute as dividend.

(2) Transfer made to Cost of Re-organisation (as for a fully-owned subsidiary ex. 8)

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H.	£100,000	Sundry Assets	£143,500
Creditors	24,500	Cash	1,300
Rev. A/c	£19,100	<u>Net Cost of Control of S.</u>	<u>9</u>
<u>Less: Min.Ints.</u>			<u>10ths</u>
$\frac{1}{10}$ of £5,500	<u>550</u>	Adjusted Cost	£15,300
	18,550	Par value	<u>18,000</u>
<u>Minority Ints.</u>	$\frac{1}{10}$ th	Trans. to Cost of Re-	£ <u>2,700</u>
Capital	£2,000	organisation	
Revenue	550	<u>Cost of Re-organisation</u>	
Cost of Re-or-		Per S's. Balance Sheet	£3,500
ganisation Dr. <u>300</u>	2,250	<u>Less: Amt. estimated</u>	
		by H. at acqn. date	<u>3,000</u> 500
		Divisible thus:	
		To H. Net C. of C.	$\frac{9}{10}$ ths £2,700
		" Min. Ints. S.	$\frac{1}{10}$ th <u>300</u>
	<u>£145,300</u>		<u>£145,300</u>

Note:

- (1) In Solution (2) a transfer of £300 of "Cost of Re-organisation" to Minority Interests is required, otherwise the Cost of Re-organisation would stand at Dr. £800

which is an unsatisfactory figure being:-

Proportion of cost not written off falling to all shareholders of S. £500

Proportion of cost not provided falling to outside shareholders of S. only 300

£800

- (2) Solution (2) is unsatisfactory since Minority Interests are not shown at a share of the net assets of S. (£25,500) as in solution (1).

Solution (1) is therefore recommended. Both solutions should be compared with solution 8.

The Writing Down of the Book value of Investments to cover losses etc. in a partly-owned subsidiary.

If the previous sections dealing with the partly-owned subsidiary have been mastered, there is no need to go into the detailed treatment of the writing down of the book value of Investments. The same principles apply as for the fully-owned subsidiary (see Chap. IV. p.5 and seq.), but it must be kept in view that instead of the whole subsidiary, only a share in it is being considered.

Unrealised Profit on Stock.

Where a partly-owned subsidiary, as distinct from a fully-owned subsidiary, buys stock from, or sells stock to, a holding company at a price above cost, which may not be as high as the price to outsiders but which nevertheless includes some profit to the selling member, the question arises as to whether all the profit or only a proportion of the profit, included in the valuation of stock on hand at balancing date, should be cancelled for the purpose of arriving at a correct Consolidated Statement. It must be ascertained at the outset how the transaction has been dealt with in the financial books. If the stock has not depreciated it will be valued "at cost" in the Balance Sheet of the buying member, i.e. at an "inflated price" but neither profit nor loss will have been made on the transaction by that company. It is in the accounts of the selling member that profit on the transaction has been credited. The expression "inflated price" and the word "inflation" are used for convenience in this section to indicate the price above cost and the profit thereon respectively, to the selling company; it is not inferred that there has been any artificial inflation. Normally the selling company, especially if it has manufactured the goods in question, is entitled to some reasonable profit on the transaction, indeed it would be unfair to its shareholders if it did not add profit simply because the transactions, which may be numerous, represent sales to a company which is inter-related to it.

If /

If it is the practice of the holding company to take credit for its proportion of the full profits of a subsidiary, as distinct from dividends declared, the holding company should create in its financial accounts a reserve representing the amount of the inflation from the holding company's point of view. By this means, the holding company avoids taking credit for what is unrealised profit. Where the holding company's practice is to take credit only for dividends received from subsidiaries no reserve need be made in the financial accounts except where the holding company is the seller of the goods (see Chapter 1 page 8).

In the Consolidated Statement the general principle to be adopted is that all unrealised profit falling to the group must be eliminated. Any reserve made in the financial accounts will be taken into account when the consolidation adjustment is made. The reserve required for consolidation purposes depends on three main factors.

- (a) The amount of profits falling to group revenue from the transaction.
- (b) The holding company's financial interest in the stock on hand.
- (c) Which member will sell the goods eventually to the public.

1st Case. Partly-owned subsidiary sells stock to the holding company.

The profit on the sale of the stock will form part of the profits of the subsidiary and these are divisible in the Consolidated Statement between the holding company and the Minority Interests according to the proportions of their relative shareholdings. Provided the holding company will dispose of the goods to the public and not return them to the subsidiary subsequent to the Balance Sheet date, the Minority Interests receive their proportion of the profit irrespective of the profit or loss on the ultimate realisation by the holding company. The group's share of the profit must be taken out in the Consolidated Statement, however, when one adjusts the Balance Sheet of the holding company. This is done by a debit to /

to Revenue Account and a credit to Stock Reserve Account of the amount of the group's share of the profit (total inflation less Minority Interests proportion).

Ex. A subsidiary $\frac{2}{3}$ rds owned, sells goods at £1,200 profit, to the holding company. The goods are unsold by the holding company at balancing date. There is no reserve for unrealised profit in the financial accounts.

The Minority Interests have earned and will retain their $\frac{1}{3}$ rd share (£400) of the profit. The holding company's share £800 must be cancelled by an adjustment of the holding company's accounts - debit Revenue Account and credit Stock Reserve Account with £800.

If, however, the holding company may not dispose of the goods to the public but return them later to the subsidiary at the same price, the Minority Interests may not retain their profit in point of fact, and so the total inflation should be eliminated by a debit to Revenue Account and a credit to Stock Reserve Account of £1,200 when the accounts of the subsidiary are being adjusted.

2nd Case. Holding company sells stock to a partly-owned subsidiary.

The profit representing the inflation ~~is~~ ^{it} all belongs to the holding company in this case ~~but~~, should generally be eliminated entirely in the Consolidated Statement by a debit to the holding company's Revenue Account and a credit to Stock Reserve Account with the total amount of the inflation. Any reserve prudently made by the holding company in its financial accounts would, of course, form a deduction from the amount of the adjusting consolidation entry.

Ex. At £1,200^{of} profit a holding company sells goods to a subsidiary $\frac{3}{4}$ ths owned. The goods are unsold by the subsidiary at balancing date. There is no reserve for unrealised profit in the financial accounts.

The holding company's profits include the £1,200^{of} profit on the stock, which profit will all fall to the group revenue in the Consolidated Statement. This should be excluded by a debit to the holding /

holding company's Revenue Account and a credit to Stock Reserve account of £1,200.

~~Now~~ If it is known that the subsidiary will dispose of the goods to the public and not return them later to the holding company, is one justified in contending that the Minority Interests can be considered as "outsiders" from the point of view of the group, that so much of the stock has been "sold" to them, and that accordingly for consolidation purposes, the group may restrict its reserve to cover only the inflation on the group's new and lesser interest in the stock? On this basis when the accounts of the holding company are being adjusted, the entry is to debit Revenue Account and credit Stock Reserve Account with the total inflation less the proportion as represented by the Minority Interests of the subsidiary, (the buying company). In the foregoing example, this amount is £900 with the effect that credit is taken for £300 of profit by the group, on the part of its goods "sold" to the Minority Interests. This is rather a controversial point and although a restriction of the required reserve in this way is not the conservative view to take, it is difficult to refute the argument that there is nothing unfair or at variance with sound accounting principles in adopting this alternative.

Profit on Plant manufactured and sold to another member.

A company manufacturing its own plant must only capitalise the cost price otherwise it is taking credit for unrealised profit. Any profit on plant sold to another member of a group should be treated in the same way as stock transfers, by a cancellation of all unrealised profit.

Dividends declared but unpaid (inter-company).

The difference in the position of a partly-owned subsidiary from that of a fully-owned subsidiary, is that the asset of the holding company (accrued dividend receivable) while a set off does not equal the liability of the subsidiary on account of the Minority Interests. The difference in the amounts falls to the Minority Interests and appears under that heading in the Consolidated Statement or /

or, alternatively, and perhaps better, under a separate heading on the grounds that it is a cash liability of the group.

Preference Shares.

Provided there are sufficient profits to meet the Preference dividend, the accounts of a subsidiary with Preference Capital should be adjusted for the provision of the full Preference dividend due to date. This is carried out by a debit to Revenue Account and a credit to Accrued Preference Dividend Account. If the holding company has acquired part of the Preference Capital, the holding company's accounts should also be adjusted in respect of the accrued Preference dividend receivable, by a debit to that Account and a credit to Revenue Account. The two accruals are a set off during the process of consolidation. The balance, if any, represents the amount due to Minority Interests (Preference Shares) and appears in the Consolidated Statement as a liability either under the heading of Minority Interests or stated separately as a cash liability. The book value of the Preference Shares held by the holding company is adjusted to cost less accrued Preference dividend to date of purchase and thereafter treated in the same way as Ordinary Shares, i.e. the difference between Adjusted Cost and par gives the equivalent to Net Cost of Control.

When Preference Shares are redeemable at a premium, the annual instalment should be provided for in the Consolidated Statement if the company has not made provision for it in its financial accounts.

The effect of a subsidiary having a large Preference Capital wholly or substantially held by outsiders, will be to increase to a marked extent the figure for Minority Interests in the Consolidated Statement. It is suggested that in such a case this heading should be sub-divided between Ordinary Shares (including share of Reserve and Profits) and Preference Shares (including Preference dividends accrued).

A word of explanation is required in connection with the deduction of Income Tax from accrued dividends. Accounts of companies should /

should be prepared to show the net profit or loss falling to the shareholders after full provision has been made for national taxation. In the accrual of Preference dividends, in practice for consolidation purposes, the usual calculation of the outstanding will be made on the basis of net figures after deduction of Income Tax. In view of the ever-varying rates of Income Tax the gross figures in respect of the accrued Preference dividends, have been used for simplicity in all the theoretical example in this work.

Re-valuation of Floating Assets or of Specific Reserves for Floating Assets.

A Balance Sheet of a company may be used when one is fixing the value of the company's shares, either as at the Balance Sheet date, or at a later date by making an allowance for the trading results from the last Balance Sheet date up to the later date of the purchase of the shares. It may happen that in making the offer for the shares, the holding company revalues the floating assets (e.g. stock) or considers that a specific reserve (e.g. for bad and doubtful debts) as stated requires revision, or that a specific reserve is in fact required.

The effect of such adjustments made to arrive at the fair purchase price of shares of a subsidiary must be considered so far as the preparation of subsequent Consolidated Statements is concerned. It should be borne in mind that the position differs from over or under-valuation of fixed assets,

- (a) since the over or under-valuation of floating assets or the re-valuation of a specific reserve, may be corrected in the later Balance Sheets presented for consolidation. Naturally if the holding company did not approve of the basis of stock valuation adopted by the subsidiary before purchase, it is likely that after control of the subsidiary is acquired, stock will be valued according to the wishes of the holding company.
- (b) since, in any event, floating assets vary in value each year so that the amount of any over or under-valuation at one date is not likely to agree with that at another date.

Accordingly the procedure adopted for consolidation purposes in the case of re-valuation of a fixed asset, is inapplicable. It is convenient to consider the matter by distinguishing under-valuation of /

of floating assets from over-valuations and in each case, by ascertaining the position when the valuations have been rectified in subsequent Balance Sheets of the subsidiary and when this has not been done.

Under-valuations (or over-provision of specific reserves for floating assets).

In the case of an under-valuation of floating assets at acquisition date no adjustment should be made during the process of a subsequent consolidation in cases where the matter has not been rectified in the subsidiary's subsequent Balance Sheet used for consolidation. The position here is that the group has the additional value in the Consolidated Statement under the Net Cost of Control figure and the additional value should simply remain there. To attempt to transfer it to the asset concerned may not bring out a correct current figure for that asset, since its Balance Sheet value at the consolidation date may differ from its value at the date the shares were purchased. If the subsidiary is not fully-owned, the additional value in the Net Cost of Control figure would represent only a proportion of the under-valuation according to the extent the subsidiary is owned, and any attempted transfer to the asset would necessitate a further adjustment for Minority Interests in order to add the full amount of the under-valuation to the asset.

Where an under-valuation (for example in stock) has been rectified in the subsequent Balance Sheet of the subsidiary, the correction may have been made by the subsidiary in the financial accounts, ^{resulting in} by an inflation of its profits since acquisition as shown by its accounts. The prudent course ^{then} for the holding company to adopt in its financial accounts would be to write down the value of "Investment in subsidiary" out of its own profits by the amount of the under-valuation at the acquisition date if the subsidiary is fully-owned. If this has been carried out in the books of the holding company then no further adjustment requires to be made during the process of consolidation but where it has not been done, the necessary /

necessary entry should be made during the process of consolidation by the adjustment of the accounts of the holding company thus:

Revenue Account	Dr. £
To Investment in subsidiary	£

(Being the amount of the under-valuation of floating assets of the subsidiary at acquisition date so far as included in the purchase price of the shares to the holding company - the entry being required to adjust the Revenue Account of the group to true trading results since acquisition; the subsidiary having corrected the under-valuation in its own books by an inflation of profits).

Over-valuations (or inadequate reserves against floating assets).

In the case of an over-valuation of floating assets of a subsidiary the rule in all cases is simple and is that no adjustment should be made in the subsequent Consolidated Statement. If the matter has not been rectified in the subsequent Balance Sheet of the subsidiary presented for consolidation, then the group has a hidden reserve in the Net Cost of Control figure of that subsidiary. If the matter has been corrected in the subsequent Balance Sheet of the subsidiary, it could only be done out of the subsidiary's post-acquisition profits as shown in its financial accounts. The group's financial position is thereby strengthened for a hidden reserve exists in the Net Cost of Control figure of that subsidiary and this reserve is no longer really required. This hidden reserve, however, should not be transferred to Revenue Account during the process of consolidation owing to the accounting principle that profits should not be inflated by a "paper" entry; in other words the reverse of the journal entry stated above in respect of an under-valuation is not recommended.

In the consideration of the treatment suggested above, the position seems to be clear if the price of the shares bought, has been fixed by a careful examination of an existing Balance Sheet. The principles, however, remain the same even although the shares are bought throughout the year. In this case, the purchasers are aware that the floating assets of the business are not correctly valued in the /

the books or that specific reserves for floating assets are required in fact, which reserves are valued at a different figure, or do not exist, in the books of the subsidiary.

It is not always possible, nor is it essential for consolidation purposes, to "construct" a Balance Sheet of a subsidiary as at the acquisition date. It is necessary, however, to ascertain or estimate certain data before the preparation of a Consolidated Statement can be attempted. To summarise, the essential information required is:

- (1) The balance at credit or debit of the Revenue Account of the subsidiary at acquisition date.
- (2) Any over or under-valuation in the books of fixed assets, which factor was taken into account in fixing the price of the shares.
- (3) Any over or under-valuation in the books of floating assets, which factor was taken into account in fixing the price of the shares.

The figure of Net Cost of Control of a subsidiary in the Consolidated Statement is the difference between the cost of the shares (adjusted in every case for (1) and (2) above) and par value. As regards (3) adjustment only leads to difficulties and is therefore not suggested except in the case of under-valuations which have been subsequently corrected in the subsidiary's financial books by an inflation of the subsidiary's profits. The adjustment in this case is imperative to arrive at the correct revenue earned by the group. Accordingly the Net Cost of Control figure in a Consolidated Statement does not invariably represent solely hidden Goodwill or Badwill. It will also be affected always by any over-valuation of floating assets in the books and sometimes by under-valuations.

Since floating assets should be valued "at cost or market value whichever is the lower" the case of re-valuation of the actual floating assets will not arise so frequently in practice as re-valuation of fixed assets. Reserves for floating assets, e.g. Bad Debts reserve are more likely to be re-valued when a purchase of shares takes place, for many companies prosecute the conservative policy /

EXAMPLE - 14.

H



$\frac{3}{4}$ ORD. BOUGHT 31/12/4.1

$\frac{1}{5}$ PREF. BOUGHT 30/9/4.3

^

^ ^

S



policy of creating larger reserves than are in fact required. An adjustment of a reserve for floating assets is of course tantamount to a re-valuation of the asset itself.

The Published Statement.

In the Directors' Report and Accounts, in which a Consolidated Statement of Assets and Liabilities is included, the Statement should be presented in much the same form as the published Balance Sheet. Fixed and floating assets should be separately grouped and outside liabilities should be totalled and kept distinct from the shareholders' interest and Minority Interests. Comparative figures, say in red print, would make the statement more informative. The heading to the statement should indicate what companies are included.

Ex. 14 A Holding Company with one partly-owned subsidiary
Having Preference Shares.

The Balance Sheets of H. and S. as at 31st Dec. 1943 were:-

<u>Liabilities</u>				<u>Assets</u>	
	<u>H.</u>	<u>S.</u>		<u>H.</u>	<u>S.</u>
Sh. Cap. 500,000 Ord. Shs. of £1 each	£500,000		Property at cost	£121,250	£105,000
" " 400,000 Ord. Shs. of 10/- ea.		£200,000	Plant at cost less depn.	210,000	108,300
" " 100,000 6% Pref. Shs. of £1 each		100,000	Invest. in sub. at cost. 300,000 Ord. Shs. (10/- each)	£180,000	
Cap. Res.	60,000	500	20,000 Pref. Shs. (£1 ea.)	21,000	201,000
Loan from S.	61,000		Loan to H.		61,000
Bank Overdraft	5,000		Stock	115,000	43,300
Bills Payable		1,700	Sundry Debtors	95,000	20,000
Sundry Creditors	38,000	6,500	Bills Receivable	1,500	
Gen. Res.	10,000	8,000	Cash on hand	250	100
P. & L. A/c	70,000	21,000			
<u>Note on H's. B/S</u>					
There is a contingent liability for Bills Receivable discounted £2,000.					
	<u>£744,000</u>	<u>£337,700</u>		<u>£744,000</u>	<u>£337,700</u>

Notes: /

- Notes: (1) H. bought 300,000 Ord. Shs. (10/- ea.) in S. for £180,000 on 31st Dec. 1941. The purchase price was settled by S's. shareholders accepting 120,000 New Ord. Shs. in H. at a premium of 10/- per share. The Cap. Res. H. £60,000 represents this premium.
- (2) On 31st Dec. 1941 S. had £11,000 and £6,000 at credit of Gen. Res. and Profit and Loss Account respectively after allowing for S's. Preference dividend. The reduction of S's. Gen. Res. to £8,000 is due to a transfer of £3,000 to Profit and Loss Account in 1942.
- (3) At acquisition date, 31st Dec. 1941, H. re-valued S's. assets as follows:

	<u>Re-valuation figure</u>	<u>S's. B/S figure</u>
Property	£100,000	£90,000 (at cost)
Plant	£100,000	120,000 (" less depn.)

S's. books were not altered in respect of the re-valuation. There was no plant additions by S. since 31st Dec. 1941. S. has written off 5% p.a. depreciation on plant and this rate is to be increased to 10% (the rate adopted by H.) in the Consolidated Statement.

- (4) On 30th Sept. 1943 H. bought 20,000 6% Pref. Shs. in S. for £21,000. S. has not yet declared its Preference dividend for the year ended 31st Dec. 1943. (The Preference dividend had been paid up to 31st Dec. 1942.)
- (5) H. is due S. £5,500 at 31st Dec. 1943. This is included in creditors and debtors respectively. ~~The Preference dividend has been paid up to 31st Dec. 1942.~~
- (6) Included in S's. Bills Payable are £1,000 of Bills drawn by H. H. has discounted £800 worth of these bills, the balance £200 being included under Bills Receivable.
- (7) H's. stock on hand at 31st Dec. 1943 includes £1,200 of goods at invoice price bought from S. When invoicing goods to H., S. adds 33¹/₃% to cost. The goods in question may be returned to S. if H. is unable to dispose of them.
- (8) The Preference Shares of S. have a preference for capital but do not share further in any surplus assets in a winding up.

Solution (a) The adjustments required in each company's accounts are:

S 1. Property Dr. £10,000
 To Capital Reserve £10,000

(Being increase in re-valuation in 1941 when H. acquired control of S.)

S 2. Capital Reserve Dr. £16,200
 To Plant £16,200

(Being current over-valn. of S's. Plant made up of over-valn. £20,000, in 1941 (when H. acquired control of S.) less 2 yrs' depn. at 10% p.a. - see below).

S 3. /

S 3. Revenue Account (Gen. Res.) Dr. £11,100
 To Plant £11,100

(Being depn. adjustment on the book value of S's. Plant since 1941 (rate increased from 5% to 10%)- see below. The position of S's. Plant is:

	<u>In Fin. A/cs 5%</u>	<u>In Cons.^d St.^t 10%</u>	
Value at acqn. date		£100,000	
31/12/41	£120,000	£120,000	Over-valn. £20,000
Depn. 1942	<u>6,000</u>	<u>12,000</u>	<u>2,000</u>
	£114,000	£108,000	£18,000
Depn. 1943	<u>5,700</u>	<u>10,800</u>	<u>1,800</u>
As at 31/12/43	<u>£108,300</u>	<u>£97,200</u>	<u>£16,200</u> [*]
	(a)	(b)	(c)
	* Dr. Cap. Res: cr. Plant A/c £16,200 (S 2.)		

(a) - (b) Difference: £11,100 Addn. depn. reqd. by group -
 Dr. Rev. A/c, cr. Plant A/c £11,100 (S 3.)

(b) - (c) Value in Consd. St^t 31/12/43 £81,000. This is of course equivalent to re-valn. figure of £100,000 in 1941 less 2 yrs. ' depn. at 10% p.a.

S 4. Revenue Account Dr. £300
 To Stock Reserve Account £300
 (Being profit on Goods (£1,200) on sale or return from S. to H. - not yet sold by H.)

S 5. Revenue Account Dr. £6,000
 To o/s Pref. Divd. A/c £6,000
 (Being accrual of 1943 pref. divd. (of which H. owns $\frac{1}{5}$ th).

H 1. Revenue Account Dr. £12,750
 To Invest. A/c (S.'s Ord. Shs.) £12,750
 (Being $\frac{3}{4}$ ths the Rev. A/c cr. bal. of S. at 31/12/41 £17,000 - pre-acqn. profits in respect of 300,000 shs. bought by H. on 31/12/41) - see note 5 for an alternative adjustment figure.)

H 2. Outstanding dividends Receivable A/c . . . Dr. £1,200
 To Rev. A/c £300
 Invest.^t A/c (S's. Pref. Shs.) 900
 (Being 1943 Pref. divd. on 20,000 due by S. of which $\frac{3}{4}$ is capitalised as H. bought the shares on 30/9/43).

- Notes: (1) Outstanding Pref. divd. £6,000. In the aggregation of the adjusted B/Ss, ~~the~~ ~~the~~ ~~contra~~ ~~to~~ ~~the~~ ~~extent~~ of £1,200 in the assets of H's. B/S ~~and~~ leaves £4,800 due to Min. Ints. (S's. Pref. Shs.). In the Consolidated Statement the £4,800 may be shown under a separate heading, if desired, on the basis that it is a cash liability of the group.
- (2) Bills. Of £1,000 due to H. in S's. B/S only £200 can be set off against the assets in H's. B/S. The balance of £800 is explained by Bills of that amount having been discounted by H. £800 is therefore an actual liability of the group. This reduces the group's contingent liability to £1,200 (£2,000 - £800).
- (3) H's. Cap. Res. £60,000. In offering £180,000 for 300,000 Ord. 10/- shs. of S., H. valued S's. shares at 10/- each. As S's. shareholders accepted H's. shares at a premium of 10/-, H's. shs. must have a value of 30/-, thus:

300,000 shs. of S. at 12/- each = £180,000

exchanged for 120,000 " " H. " 30/- " = £180,000

The offer therefore was 2 shs. of H. for every 5 shs. held in S.

By taking advantage of the market price of H's. shares (probably over 30/-) H. created a Capital Reserve of £60,000 which was more than sufficient to offset the Net Cost of Control in the Consolidated Statement.

- (4) Rev. A/c. £76,250. This should be sub-divided between Gen. Res. and P. & L. A/c according to the wishes of the controllers of the group. It represents the undivided profits of H. and a proportion of those of S. since acquisition date. S's. Gen. Res. at acquisition date was £11,000, and at 31st Dec. 1943 it is £8,000 so that the Gen. Res. of the group should contain no portion of S's. Gen. Res. for nothing has been credited thereto since acquisition. The controllers might decide therefore that the Gen. Res. of the group should be £10,000 (H's. B/S figure) and Rev. A/c would be sub-divided thus:

Gen. Res. £10,000

P. & L. A/c 66,250 £76,250

It could be argued, however, that the extra depreciation debited in S's. Rev. A/c £11,100 (See S 3.) of which H. bears $\frac{3}{4}$ ths or £8,325, should be charged to Gen. Res. to the extent of £8,325 on the grounds that the group P. & L. A/c should bear the closest relation possible to the P. & L. A/cs of members.

(5) /

- (5) Pre-acquisition Rev. A/c bal. of S. £17,000. H's. $\frac{3}{4}$ th sh. of this bal. has been capitalised in full in the above Consd. St^t (see H 1.)

There is a case, however, for a restriction of this amount owing to the fact that S. is charging against profits and will continue to so charge until the plant is written off, depreciation on the valuation difference at the date H. acquired control (Plant over-valued by £20,000). In every case of a wasting asset which is found over-valued in the financial books of the subsidiary and the over-valuation is taken into account in fixing the price of the shares, there appears to be no objection to a setting off of all depreciation written off by the subsidiary up to date on the valuation difference, against a cr. pre-acqn. rev. bal. In the above example the over-valuation at 1941 was £20,000 and depreciation thereon at 5% as written off by S. for 2 years £1,950 (1000 + 950) can be used to reduce the amount capd. as pre-acqn. profits by the holding company for consolidation purposes at 31st Dec. 1943. The amount in H 1. £12,750 ($\frac{3}{4}$ ths of £17,000) may if desired be restricted at 31/12/43 to £11,288 made up thus:

Pre-acqn. cr. bal. at 31st Dec. 1941	£17,000
<u>Less: Depn. on valn. diff. charged against subsidiary's profits</u>	<u>1,950</u>
	£15,050
H's. sh. $\frac{3}{4}$ ths thereof	<u>£11,288</u>

- (6) Depreciation adjustment. S's. Plant. 5% increased to 10% by the group.

It should be noted that it is not the re-valuation figure (£100,000) but the book value of the asset (£120,000) which is used to make the calculation of the additional depreciation to be written off by the group (see S 3.) S's. Rev. A/c in the financial books will write off £120,000 over the life of the asset, by the annual 5% depreciation charge and probably by a substantial obsolescence charge when the plant is scrapped. In the Consolidated Statement, a rate of 10% is adopted annually so that the obsolescence charge to the group will probably be quite small. The point is that during the life of the asset S. will write off £120,000 and this amount will be lost to the group revenue. Further it should be noted that in the adjusted B/S of S., the plant appears at a figure of £81,000 which is in fact the re-valuation figure £100,000 less 2 yrs.' depn. at 10% (£10,000 + £9,000). The over-valuation of S's. Plant at acquisition date £20,000 does not remain static. At any particular consolidation date the adjustment for over-valuation is made at the estimated amount of over-valuation at that consolidation date (£16,200 - see S 2. - at 31/12/43).

The Published Statement might be as follows:-

Consolidated Statement of Assets & Liabilities as at
31st Dec. 1943, of H. Ltd. and its Subsidiary.

<u>A S S E T S</u>		Previous year's figures	
<u>Fixed Assets</u>			
i.	Property at cost	£236,250	£236,250
ii.	Plant " " less depreciation	301,750 538,000	291,000 £527,250
<u>Current Assets</u>			
i.	Stock on hand	£144,000	£158,000
ii.	Sundry Debtors	105,000	109,500
iii.	Bills Receivable	2,600	1,300
iv.	Cash on hand	1,200	350
		252,800	269,150
	Director		
	Director		
		<u>790,800</u>	<u>£796,400</u>
<u>L I A B I L I T I E S</u>		Previous year's figures	
i.	Issued Capital of H. Ltd. 500,000 Ord. Shs. of £1 each fully paid	£500,000	£500,000
ii.	Capital Reserve	35,625	38,375
iii.	General Reserve	8,000	10,000
iv.	Profit & Loss Account	65,375	66,250
		£609,000	£614,625
v.	<u>Minority Interests</u>		
	Share of Capital, Reserves and Profit & Loss Account falling to outside shareholders.		
	Ordinary	£45,500	£51,475
	Preference	106,000	84,800
		151,500	136,275
vi.	<u>Outside Liabilities</u>		
	Sundry Creditors	29,300	39,000
	Bills Payable	1,000	1,500
	Bank Overdraft	-	5,000
		30,300	45,500
<u>Note:</u>	There is a Contingent liability in respect of Bills Receivable discounted. £1,200.		
		<u>£ 790,800</u>	<u>£796,400</u>
	Auditors' docquet.		

Note: Property is stated "at cost" although it includes the re-valuation figure of S. This, however, is the cost of S's. Property to the group.

PROVISIONS and RESERVES

It has already been shown that the Minority Interest figure includes the proportion of Profit and Loss Account and General and Capital Reserves falling to the outside Shareholders. The treatment of specific reserves is now considered. Under this category will fall Bad Debts Reserve, Depreciation Reserve, Sinking Fund Reserve, Income Tax Reserve (liability based on the Accounts under review but not payable until the following Income Tax year).

Where the specific reserve is fair and reasonable in amount, and is in fact required at the Balance Sheet date, then it should be treated like an ordinary liability, and no part thereof should be transferred to the Minority Interests. But any excess over the amount that is reasonable, is really analagous to a General Reserve, and the Minority Interests should be given their share of the excess. But A Reserve for Income Tax, based on the Accounts under review but not payable until the following year, is really just a prudent earmarking for the Government, of part of the Profit and Loss Account. Such an Income Tax Reserve should be treated like the Profit and Loss Account balance, and therefore allocated between the Minority Interests and the Holding Company. The test to apply is similar to the principle which should be adopted in valuing a business. One would deduct from the value of the assets the total of the actual liabilities as at the Balance Sheet date (creditors, loans, accrued charges, fair reserve for Bad Debts, the current Income Tax liability, etc.). The resultant net worth of the business, however, can be built up from the Share Capital and the items on the liabilities side of the Balance Sheet, which were not deducted in arriving at the net worth, i.e. Profit and Loss Account, General and Capital Reserves, excessive specific Reserves and any Income Tax Reserve which is based on the Accounts under review but which is not a liability at date, but a liability deferred until the next financial year.

The Subsidiary's pre-acquisition balance to be capitalised in the Consolidated Statement includes all these balances. The Minority Interests valuation is also a share of the net worth - it is the share belonging to outsiders at the consolidation date.

CHAPTER VI. Two or more Subsidiaries - Sub-subsidiaries.

A Consolidated Statement of Assets and Liabilities for a group consisting of a holding company and several subsidiaries, is prepared by the adjustment of the figures of each company as if it were the only subsidiary, the aggregation of the adjusted Balance Sheets and the preparation of the Consolidated Statement from the aggregation. The Minority Interests heading will include the outside shareholders of all subsidiaries, while the Net Cost of Control will be the cost to date of the "hidden" Goodwill of all the subsidiaries so far as acquired by the holding company. Apart from the increase in arithmetic, it is just as easy to consolidate several subsidiaries as one. In a large group the advantage of the balancing of each adjusted Balance Sheet is that errors are localised to a particular member.

It is not the general practice to limit Consolidated Statements so that they embody only subsidiaries defined as such by the 1929 Company Act (section 127). On the contrary, any company, controlled directly or indirectly through nominees or through another company or companies, by the holding company is usually treated as a member of the group and is therefore included in the statement. New problems arise when the group includes a sub-subsidiary, i.e. where a subsidiary itself is a holding company controlling its own subsidiary (called a sub-subsidiary of the group).

Net Cost of Control of a Sub-subsidiary.

As the relation between a subsidiary and a sub-subsidiary is the same as that between a holding company and a subsidiary, there is no new difficulty in the determination of the Net Cost of Control (Goodwill or Capital Reserve) of the sub-subsidiary to the subsidiary, but the important question arises as to whether the Net Cost of Control should be stated in the Consolidated Statement of the entire group at that cost or at the net cost to the group, that is to say in the latter case after an allocation of a proportion of that cost to the Minority Interests of the subsidiary which holds /

holds the shares.

Consider the theoretical case of three companies H. S. and T. all newly formed on 31/12/46, whose Balance Sheets at that date are:-

	<u>Liabilities</u>			<u>Assets</u>			
	<u>H.</u>	<u>S.</u>	<u>T.</u>	<u>H.</u>	<u>S.</u>	<u>T.</u>	
Sh.Cap. in £1 Ord. Shs.	£100,000	£20,000	£12,000	Sundry Assets	£84,000	£ 2,000	£12,000
				Cash	16,000	18,000	-
	<u>£100,000</u>	<u>£20,000</u>	<u>£12,000</u>		<u>£100,000</u>	<u>£20,000</u>	<u>£12,000</u>

At 31/12/46 H. buys $\frac{3}{4}$ ths of S. (15,000 shs.) for £16,000 and S. buys all the shares in T. for £18,000. The Balance Sheets then become:

	<u>Liabilities</u>			<u>Assets</u>			
	<u>H.</u>	<u>S.</u>	<u>T.</u>	<u>H.</u>	<u>S.</u>	<u>T.</u>	
Sh. Cap.	£100,000	£20,000	£12,000	Sundry Assets	£84,000	£ 2,000	£12,000
				Invest ^{ts} at cost In S (15000 shs.)	16,000		
				" T (12000 ")		18,000	
	<u>£100,000</u>	<u>£20,000</u>	<u>£12,000</u>		<u>£100,000</u>	<u>£20,000</u>	<u>£12,000</u>

T. is an example of a sub-subsidiary of the holding company (H). It is controlled directly by S. and indirectly by H. through S. The Net Cost of Control of T. by S. is £6,000 (Cost £18,000 less par £12,000). The group, however, only owns $\frac{3}{4}$ ths of S. so that it is reasonable to contend that the Net Cost of Control of T. by the group is only £4,500 the remaining $\frac{1}{4}$ th being the concern of the Minority Interests of S.

The alternative Consolidated Statements are:

Method /

Method (a) Net Cost of Control of the sub-subsidiary shown at total cost:

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. . . H. . . .	£100,000	Sundry Assets	£98,000
Min. Ints. S. ($\frac{1}{4}$ th) Capital	5,000	<u>Goodwill, Net C. of C. at total cost.</u>	
		By S. in T.	By H. in S. ($\frac{2}{4}$ ths)
		Cost £18,000	£16,000
		Par 12,000	15,000
		£ 6,000	£ 1,000
			7,000
	<u>£105,000</u>		<u>£105,000</u>

Method (b) Net Cost of Control of the sub-subsidiary at net cost to the group:

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. . . H. . . .	£100,000	Sundry Assets	£98,000
Min. Ints. S. ($\frac{1}{4}$ th) Capital £5,000		<u>Goodwill, Net C. of C. to the group</u>	
<u>Less: Net C. of C. of T. ($\frac{1}{4}$th)</u>	<u>1,500</u> 3,500	By S. in T.	By H. in S. ($\frac{2}{4}$ th)
		Cost £18,000	£16,000
		Par 12,000	15,000
		£ 6,000	£ 1,000
		<u>Less:</u>	
		M.I. S. $\frac{1}{4}$ th	1,500
		£ 4,500	£ 1,000
			5,500
	<u>£103,500</u>		<u>£103,500</u>

It is relevant to consider the position if company T. had included its valuable Goodwill as an Asset on formation. The Balance Sheets would then have read:

<u>Liabilities</u>			<u>Assets</u>		
H.	S.	T.	H.	S.	T.
Sh. Cap. (in £1 Ord. Shs.)	£100,000	£20,000	£18,000	Goodwill	6,000
				Sundry Assets	£84,000
				Invest ^{ts} at cost	£ 2,000
				In S. 15,000	12,000
				" T. 18,000	18,000
<u>Solution /</u>	<u>£100,000</u>	<u>£20,000</u>	<u>£18,000</u>	<u>£100,000</u>	<u>£20,000</u>
				<u>£18,000</u>	

Solution (c) The relative Consolidated Statement would have been:

<u>Liabilities</u>		<u>Assets</u>	
Sh. Cap. H.	£100,000	Sundry Assets	£98,000
M.I. S. $\frac{1}{4}$ th Capital	5,000	Goodwill per B/Ss	6,000
	£105,000	" Net C. of C. of S. by H.	1,000
			£105,000

Consider now the valuation of the Minority Interests in the 3 cases.

In Sol.ⁿ(a) £5000 i.e. In Sol.ⁿ(b) £3500 i.e. In Sol.ⁿ(c) £5000 i.e.

$\frac{1}{4}$ th the Sundry Assets of S. & T. including T's. "hidden" Goodwill but excluding S's. "hidden" Goodwill, thus:-	$\frac{1}{4}$ th the book value of Sundry Assets of S. & T. excluding all "hidden" Goodwill, thus:-	$\frac{1}{4}$ th the book value of all Assets of S. & T. excluding S's. "hidden" Goodwill (T's. Goodwill is in its B/S)
Sundry Assets S. & T. £14,000 T's. Goodwill as computed by S. in p.p. 6,000 <u>£20,000</u>	Sundry Assets S. & T. £14,000 <u>£14,000</u>	Sundry Assets S. & T. . £14,000 Goodwill per T's. B/S 6,000 <u>£20,000</u>
$\frac{1}{4}$ th thereof £ 5,000	$\frac{1}{4}$ th thereof £3,500	$\frac{1}{4}$ th thereof <u>£ 5,000</u>

Note: In this solution no specific allocation of a share of the Net C. of C. of T. is made to S's. M.I. The "hidden" Goodwill of T. exists already in S's. book value of the Invest.^t in T. (12,000 shs. valued at £18,000).

Note: Although in the arithmetical work of this solution a share of the Net C. of C. of T. is allocated to S's. M.I., the real effect of this transfer, £1,500, is to cancel the "hidden" Goodwill of T. which already exists in the figure of £5,000. The £5,000 is $\frac{1}{4}$ th of S's. Net Assets £20,000 which include 12,000 shs. in T. valued at £18,000.

In other circumstances the Net Cost of Control of the subsidiary may well result in a credit balance (a Capital Reserve to the subsidiary in consolidation) but the same alternative solutions are available. The compiler must decide which principle has his preference. Some text book writers have adopted method (a) but **Method (b) is considered better** for three main reasons.

(1) The valuation of Minority Interests excludes "hidden" Goodwill of both the subsidiary (see p.v.(8)) and the sub-subsidiary. Consistent principles therefore are being adopted in the compilation of the figure of Minority Interests of all members in the Consolidated Statement.

(2) The /

- (2) The Net Cost of Control is shown at cost to the group (i.e. to the holding company) to date so far as acquired. In the above example, if H. subsequently buys the remaining 5,000 shares in S. the price to be paid for the shares will depend not only on the valuation of S's. Goodwill at that purchase date but also on the valuation of T's. Goodwill at the same date, and both valuations may well be altered. By the adoption of the principles of method (b) throughout, the increase in the Net Cost of Control as shown in the subsequent Consolidated Statement will represent exactly the amount expended on Goodwill by the group to acquire the interests of the remaining outside shareholders. Similarly if H. compels S. to transfer its holding in T. to H. so that T. becomes a fully-owned subsidiary of H, the fair transfer price is unlikely to be S's. book value figure (30/- per share) as it will depend on the value of T's. Goodwill as at the later date (date of transfer). If the Consolidated Statements are being prepared according to the principles of method (b) the increase in the Net Cost of Control shown after the transfer, will represent again the price paid by the group in acquiring the remaining $\frac{1}{4}$ th share of T. thus:

	<u>Transfer Price</u>	
	<u>say 35/- per sh.</u>	<u>say 30/- per sh. (Bk. value)</u>
12,000 shs. in T. transferred by S. to H.	£21,000	£18,000
Par value	<u>12,000</u>	<u>12,000</u>
	£ 9,000	£ 6,000
<u>Less: Cap. Res. S. Profit on sale.</u>		
Transfer price	£21,000	£ 18,000
Book value	<u>18,000</u>	<u>18,000</u>
Profit to S.	<u>£ 3,000</u>	----
$\frac{3}{4}$ ths thereof to H.	<u>£2250</u>	<u>2,250</u>
Net C. of C. of T. to the group	£ 6,750	£ 6,000
" " " " " as before	<u>4,500</u>	<u>4,500</u>
Increase in Net C. of C. due to acqn. of remaining $\frac{1}{4}$ th share in T.	£ <u>2,250</u>	£ <u>1,500</u>

(3000 shs. at 15/- premium (£3000 shs. at
10/- premium)

Note: For simplicity the above ignores any question of accrued trading profit included in the transfer price.

The adoption of method (a) would give

Net C. of C. of T. (as above)	£6,750	£ 6,000
" " " before transfer	<u>6,000</u>	<u>6,000</u>
	<u>£ 750</u>	£ ----

(3,000 shs. at 5/- extra premium)

- (3) If the effect of a realisation of the shares in a sub-sub-sidiary is considered, the soundness of method (b) is even more apparent. A holding company's effective financial interest in a particular sub-sub-sidiary may be quite small (see Chapter 1 page 3). Let it be assumed that a holding company's (H. Ltd.'s) effective financial interest in a sub-sub-sidiary (Z. Ltd.) is only $\frac{1}{20}$ th and that the Net Cost of Control of Z. Ltd. to the company which holds Z's. shares directly (say Y. Ltd.) is £10,000. If Y. Ltd. subsequently realises Z's. shares at a poor figure so that nothing is received in the price for Z's. "hidden" Goodwill, Y. Ltd. will require to write off against profits, a loss on realisation of at least £10,000. Now H. Ltd. (and the group represented by H. Ltd., its subsidiaries and sub-sub-sidiaries) will only bear $\frac{1}{20}$ th of this loss as portions of it, representing in all $\frac{19}{20}$ ths, will be borne by the Minority Interests of all the intermediate companies which exist in the financial link between H. Ltd. and Z. Ltd. If method (b) has been adopted during the preparation of all Consolidated Statements of the group, the Net Cost of Control to the group will be affected by $\frac{1}{20}$ th of £10,000, or £500 when Y. purchased Z's. shares, and on realisation of Z's. shares the Net Cost of Control will again be affected, this time by a reduction of £500. At the same time the group's Revenue Account will be adversely affected by $\frac{1}{20}$ th of the loss on realisation of the shares. Method (a) would give a very different and unsatisfactory picture of the group - after realisation of Z's. shares Net Cost of Control would fall by £10,000 and the Minority Interests figure would fall by $\frac{19}{20}$ ths of £10,000 or £9,500.

Whichever view is taken, the description used for headings of items in the Consolidated Statement should make clear exactly what is included under each.

Method (a)

- For Goodwill or Cap. Res. - Net Cost of Control in respect of all shares purchased by members of the group.
- " Min. Ints. - Share of Net Assets applicable to outside shareholders including the relative proportion of the Net Cost of Control of sub-sub-sidiaries.

Method (b) (recommended)

- For Goodwill or Cap. Res. - Net Cost of Control of subsidiaries and sub-sub-sidiaries to the group to the extent they have been effectively acquired.
- " Min. Ints. - Share of Net Assets applicable to outside shareholders, Goodwill being included only when valued in a member's Balance Sheet.

Method (b) appeals to the writer as the sounder method and, accordingly, during the consolidation procedure in all future examples, the Minority Interests of a subsidiary which holds shares in a sub /

sub-subsidiary, are allocated their appropriate share of the Net Cost of Control of the sub-subsidiary. It is emphasised that this allocation reduces the Minority Interests valuation to a figure which excludes all Goodwill except that shown in the Balance Sheets as such. The allocation amounts to a cancellation of the Minority Interests share of the sub-subsidiary's "hidden" Goodwill, which is already part of the Net Assets of the subsidiary as shown in the original Balance Sheet. (See solution b. above. The Minority Interests of S. are $\frac{1}{4}$ th. $\frac{1}{4}$ th of S's. Net Assets is £5,000. But S's. Net Assets include 12,000 Ordinary Shares in T. at a figure of £18,000. The "hidden" Goodwill of T. is therefore £6,000. An allocation to the Minority Interests, S. of $\frac{1}{4}$ th of £6,000, reduces the Minority Interests valuation in the Consolidated Statement to £3,500, which is equivalent to $\frac{1}{4}$ th of the Net Assets of S. and T. excluding all "hidden" Goodwill).

When cross-holdings exist (see Chapter IX), method (b) seems to become imperative to arrive at a correct Consolidated Statement and this fact strengthens the case for the general adoption of the principle.

Revenue Accounts.

Where a subsidiary holds shares in a sub-subsidiary, the Minority Interests of the subsidiary are entitled to, and must be allocated, their appropriate share of two revenue balances namely (1) the adjusted balance on Revenue Account of the subsidiary, and (2) the share which falls to that subsidiary, of the adjusted Revenue Account of the sub-subsidiary.

It should be noted that it is the adjusted balance on Revenue Account of both companies which is allocated, and as regards (1) that balance has already been adjusted with the amount which was required to arrive at the "Adjusted Cost" of the shares in the sub-subsidiary (pre-acquisition adjustment). Nevertheless, the Minority Interests in effect take a share of the original Revenue Account balance of the subsidiary, during the process of consolidation, (a) directly by being allocated their appropriate share of the adjusted Revenue Account balance and (b) indirectly when they are allocated a share of the Net Cost of Control of the sub-subsidiary. (see ex. 16)

EXAMPLES 15 AND 16.

H



$\frac{3}{4}$ BOUGHT 31/12/46



S



ALL BOUGHT 31/12/46



Example 15 - Subsidiary having fully-owned Sub-subsidiary. All holdings bought on same date at Balance Sheet price:

The summarised Balance Sheets of a group at 31st December 1946 are:-

								<u>ASSETS</u>		
								<u>H</u>	<u>S</u>	<u>T</u>
Goodwill at cost	..	..	..	..	..	..	..		£ 2,000	£ 3,000
Sundry Assets	..	..	..	..	..	..	..	£110,500	12,000	17,000
<u>Investment at cost:</u>										
In S	15,000	shares	at	26/-	each	..	..	19,500		
In T	12,000	shares	at	30/-	each	..	..	-	18,000	-
								£130,000	£ 32,000	£ 20,000

								<u>LIABILITIES</u>		
Share Capital (in £1 Ord. Shares)	..	..	..	..	..	..	..	£100,000	£ 20,000	£ 12,000
Creditors	..	..	..	..	..	..	..	20,000	6,000	2,000
Profit and Loss Account	..	..	..	..	..	..	..	10,000	4,000	3,000
Capital Reserve	..	..	..	..	..	..	..	-	2,000	3,000
								£130,000	£ 32,000	£ 20,000

H bought $\frac{3}{4}$ of S on 31st December 1946 and S bought all T's shares on 31st December 1946

SOLUTION

The Balance Sheet value of S's shares is 26/- each and T's shares 30/- each. As H and S bought their holdings at these prices the Consolidated Statement should show Net Cost of Control at Nil.

(a) The adjustments required in each company's accounts are:-

H (1) Revenue Account Dr. £3,000
 To Investment Account (in S.) £3,000

(Being $\frac{3}{4}$ the Revenue balance of S on 31:12:46 (£4,000) - pre-acquisition - when H bought 15,000 shares ($\frac{3}{4}$) in S).

S (1) Revenue Account Dr. £3,000
 To Investment Account (in T) £3,000

(Being the Revenue balance of T on 31:12:46 - pre-acquisition - when S bought all the shares in T)

(b) The Aggregation of the Adjusted Balance Sheets, is:-

								<u>Total</u>	<u>H</u>	<u>S</u>	<u>T</u>
Goodwill	..	..	..	..	..	..	£ 5,000	£ -	£ 2,000	£ 3,000
Sundry Assets	..	..	..	..	..	..	139,500	110,500	12,000	17,000
<u>Investments at Adjusted Cost:</u>											
In S	(15,000	shares)	..	..	..	..	16,500	16,500	-	-
T	(12,000	shares)	..	..	..	..	15,000	-	15,000	-
							£176,000	£127,000	£ 29,000	£ 20,000	

LIABILITIES

(b) Continued/

<u>LIABILITIES</u>						<u>Total</u>	<u>H</u>	<u>S</u>	<u>T</u>
Capital	..	..	..	..	..	£132,000	£100,000	£ 20,000	£ 12,000
Creditors	..	..	..	..	..	28,000	20,000	6,000	2,000
Revenue Account	..	..	..	..	..	11,000	7,000	1,000	3,000
Capital Reserve	..	..	..	..	..	5,000	-	2,000	3,000
						<u>£176,000</u>	<u>£127,000</u>	<u>£ 29,000</u>	<u>£ 20,000</u>

(c) The Consolidated Statement is:-

<u>ASSETS</u>										
Sundry Assets.	£139,500
Goodwill per Balance Sheets..	5,000
<u>Goodwill - Net Cost of Control to the Group:</u>								<u>By S</u>	<u>By H In</u>	
								<u>In T</u>	<u>S (3/4)</u>	
Adjusted Cost	£ 15,000	£ 16,500	
<u>Less: Capital Reserve.</u>	3,000	1,500	
Par	£ 12,000	£ 15,000	
								<u>12,000</u>	<u>15,000</u>	
										<u>£144,500</u>

<u>LIABILITIES</u>										
Share Capital H	£100,000
Creditors	28,000
<u>Capital Reserve:</u>										
T.	<u>£ 3,000</u>
(Falling to S - see Goodwill - Net Cost of Control)										
S.	£ 2,000
To Minority Interests S $\frac{1}{4}$	£ 500		
To H.	<u>1,500</u>	<u>2,000</u>	
Revenue Account	£ 11,000
<u>Less: Minority Interests S $\frac{1}{4}$ of ($\frac{1,000}{S} + \frac{3,000}{T}$)</u>	<u>1,000</u> 10,000
<u>Minority Interests S $\frac{1}{4}$:</u>										
Capital	£ 5,000		
Capital Reserve..	500		
Revenue Account..	<u>1,000</u>		<u>6,500</u>
										<u>£144,500</u>

Notes:

- (1) The Minority Interests S receive $\frac{1}{4}$ of the adjusted Revenue Accounts of S and T
- (2) The Net Cost of Control of T by S works out at Nil so that there is no transfer to make to S's Minority Interests (see next example)
- (3) The Minority Interests S $\frac{1}{4}$ £6,500, can be calculated independently by taking $\frac{1}{4}$ of the Net Assets of S and T as shown on the original Balance Sheets, thus:-

	<u>S</u>	<u>T</u>
Goodwill per Balance Sheet	£ 2,000	£ 3,000
Sundry Assets.	<u>12,000</u>	<u>17,000</u>
	£ 14,000	£ 20,000
<u>Less: Creditors</u>	<u>6,000</u>	<u>2,000</u>
	£ 8,000	£ 18,000
	V	
	£26,000	
S's Minority Interests $\frac{1}{4}$ thereof	£ 6,500	

Example 16 - Subsidiary having a fully-owned Sub-subsubsidiary. All holdings bought on same date at Market Price.

The summarised Balance Sheets of a group at 31st December 1946 are:-

	<u>ASSETS</u>	<u>H</u>	<u>S</u>	<u>T</u>
Sundry Assets		£110,500	£ 12,000	£ 17,000
<u>Investments at Cost:</u>				
In S 15,000 shares at 26/- each.		19,500		
T 12,000 shares at 30/- each.			18,000	
		£130,000	£ 30,000	£ 17,000
		£130,000	£ 30,000	£ 17,000
	<u>LIABILITIES</u>			
Share Capital (in £1 Ord. Shares)		£100,000	£ 20,000	£ 12,000
Creditors.. .. .		20,000	6,000	2,000
Revenue Account.		10,000	4,000	3,000
		£130,000	£ 30,000	£ 17,000
		£130,000	£ 30,000	£ 17,000

H purchased $\frac{5}{4}$ of S, and S purchased all T on 31st December 1946.

SOLUTION

The above example is the same as the previous example except that Goodwill is omitted from S and T's Balance Sheets.

- (a) The adjustments required in each company's accounts are the same as in the previous example.
- (b) The aggregation of the adjusted Balance Sheets, is:-

	<u>ASSETS</u>	<u>Total</u>	<u>H</u>	<u>S</u>	<u>T</u>
Sundry Assets		£139,500	£110,500	£ 12,000	£ 17,000
<u>Investments at Adjusted Cost:</u>					
In S 15,000 shares		16,500	16,500	-	-
T 12,000 shares		15,000		15,000	
		£171,000	£127,000	£ 27,000	£ 17,000
		£171,000	£127,000	£ 27,000	£ 17,000
	<u>LIABILITIES</u>				
Capital		£132,000	£100,000	£ 20,000	£ 12,000
Creditors.. .. .		28,000	20,000	6,000	2,000
Revenue Account.		11,000	7,000	1,000	3,000
		£171,000	£127,000	£ 27,000	£ 17,000
		£171,000	£127,000	£ 27,000	£ 17,000

- (c) The Consolidated Statements is:-

	<u>ASSETS</u>			
Sundry Assets				£139,500
<u>Goodwill - Net Cost of Control to the Group:</u>		<u>By S</u>	<u>By H In</u>	
		<u>In T</u>	<u>S $\frac{3}{4}$</u>	
Adjusted Cost.. .. .		£ 15,000	£ 16,500	
Par.. .. .		12,000	15,000	
		£ 3,000	£ 1,500	
		750	-	
<u>Less: Minority Interests $\\$ \frac{1}{4}$.. .. .</u>				
		£ 2,250	£ 1,500	3,750
		£ 2,250	£ 1,500	3,750
				£143,250

LIABILITIES

Share Capital H	£100,000
Creditors	28,000
Revenue Account	£ 11,000
<u>Less: Minority Interests</u> S $\frac{1}{4}$ of (£1,000 ^S + £3,000 ^T)	<u>1,000</u> 10,000
<u>Minority Interests:</u>	S $\frac{1}{4}$
Capital	£ 5,000
Revenue Account.. .. .	1,000
Net Cost of Control of T .. .. .	..Dr. 750 5,250
	<u>£143,250</u>

Notes:

- (1) The Minority Interests S take a fourth share of the adjusted Revenue balances of S and T $\frac{1}{4}$ of (£1,000 S + £3,000 T). The difference between S's £1,000 and the original Revenue balance S £4,000 is due to the adjustment ^{in respect of} of the pre-acquisition balance of T capitalised by S. The Minority Interests S take their share of this difference when they are allocated $\frac{1}{4}$ of the Net Cost of Control of T by S (£750). In effect they are therefore credited with $\frac{1}{4}$ of the Revenue balances of S and T as per the current Balance Sheets.
- (2) A comparison between the above and the previous example is interesting. Goodwill has fallen to £3,750 being $\frac{3}{4}$ of both T's (£3,000) and S's (£2,000) undisclosed Goodwill. The Minority Interests £5,250 represent $\frac{1}{4}$ of the Net Assets of S and T thus:-

	<u>S</u>	<u>T</u>
Sundry Assets	£ 12,000	£ 17,000
<u>Less: Creditors</u>	<u>6,000</u>	<u>2,000</u>
	£ 6,000	£ 15,000
	<u>£ 21,000</u>	$\frac{1}{4}$ thereof £5,250.

Pre-acquisition revenue balance of a subsidiary
which controls a sub-subsidiary.

Where a holding company purchases control of a subsidiary and at a subsequent date the subsidiary purchases control of a sub-subsidiary the amounts to be capitalised in respect of the pre-acquisition revenue balances, by the holding company and by the subsidiary, are the appropriate proportion of the Revenue Account balances of the subsidiary and the sub-subsidiary respectively at the date of each purchase.

EXAMPLE - 17.

H



$\frac{3}{4}$ BOUGHT - 31/12/40



\$



ALL BOUGHT 31/12/42



T



Example 17 - Subsidiary having a fully-owned Sub-subsidiary. The Subsidiary acquired before the Sub-subsidiary Holdings bought at market value:

The summarised Balance Sheets of a group at 31st December 1946 are:-

		<u>ASSETS</u>		<u>H</u>	<u>S</u>	<u>T</u>
Sundry Assets	.. .. .	.. .. .	.. .. .	£111,000	£ 17,000	£ 15,000
<u>Investments at cost:</u>						
In S	15,000 shares at 25/4d each	.. .. .	.. .. .	19,000	-	-
T	12,000 shares at 23/4d each	.. .. .	.. .. .	-	14,000	-
				<u>£130,000</u>	<u>£ 31,000</u>	<u>£ 15,000</u>
		<u>LIABILITIES</u>				
Share Capital (in.£1 Ordinary shares)	.. .. .	.. .. .	.. .. .	£100,000	£ 20,000	£ 12,000
Creditors	.. .. .	.. .. .	.. .. .	20,000	6,000	2,000
Revenue Account	.. .. .	.. .. .	.. .. .	10,000	5,000	1,000
				<u>£130,000</u>	<u>£ 31,000</u>	<u>£ 15,000</u>

H bought $\frac{3}{4}$ S in 1940 when the Revenue Account balance of S was credit £3,000
 S bought all T in 1942 when the Revenue Account balance of T was credit £2,800

(a) The adjustments required in each company's accounts are:-

		<u>SOLUTION</u>	
H	1. Revenue Account	.. .. .	Dr £ 2,250
	To Investment Account (in S)	.. .. .	£ 2,250
	(Being $\frac{3}{4}$ the Revenue Account balance of S in 1940 (credit £3,000) - pre-acquisition - when H bought 15,000 shares ($\frac{3}{4}$) in S).		
S	1. Revenue Account	.. .. .	Dr £2,800
	To Investment Account (in T)	.. .. .	£ 2,800
	(Being the Revenue Account balance of T in 1942 (credit £2,800) - pre-acquisition when S bought 12,000 shares in T - all T)		

(b) The aggregation of the adjusted Balance Sheets, is:-

		<u>ASSETS</u>	<u>Total</u>	<u>H</u>	<u>S</u>	<u>T</u>
Sundry Assets.	.. .. .	.. .. .	£143,000	£111,000	£ 17,000	£ 15,000
<u>Investments at Adjusted Cost:</u>						
In S	15,000 shares..	.. .. .	16,750	16,750	-	-
T	12,000 shares..	.. .. .	11,200	-	11,200	-
			<u>£170,950</u>	<u>£127,750</u>	<u>£ 28,200</u>	<u>£ 15,000</u>
		<u>LIABILITIES</u>				
Capital..	.. .. .	.. .. .	£132,000	£100,000	£ 20,000	£ 12,000
Creditors	.. .. .	.. .. .	28,000	20,000	6,000	2,000
Revenue Account	.. .. .	.. .. .	10,950	7,750	2,200	1,000
			<u>£170,950</u>	<u>£127,750</u>	<u>£ 28,200</u>	<u>£ 15,000</u>

(c) The Consolidated Statement is/

ASSETS

Sundry Assets	£143,000
<u>Goodwill - Net Cost of Control to group:</u>	
	By S <u>In T</u> By H <u>In S $\frac{3}{4}$</u>
Adjusted Cost	£ 11,200
Par	12,000
	Cr.£ 800 Br 1,750
<u>Less: Minority Interests S $\frac{1}{4}$</u>	<u>200</u> -
	Cr £ 600 Br 1,750 1,150
	<u>£144,150</u>

LIABILITIES

Share Capital H	£100,000
Creditors	28,000
<u>Revenue Account</u>	£ 10,950
<u>Less: Minority Interests S</u>	
$\frac{1}{4}$ ($\frac{S}{2,200} + \frac{T}{1,000}$)	<u>800</u> 10,150
<u>Minority Interests:</u>	S $\frac{1}{4}$
Capital	£ 5,000
Revenue Account	800
Net Cost of Control of T.	Cr. 200 6,000
	<u>£144,150</u>

Notes:

- (1) Since T was acquired after S, the capitalisation of pre-acquisition revenue balances is quite straightforward.
- (2) T's balance on Revenue Account in 1942 was £2,800. At 31st December 1946 it was reduced to £1,000. But S must still capitalise £2,800. The reduction represents either an excess of dividends paid over profits earned (since acquisition) by T or a net loss by T since acquisition, both of which are chargeable against the revenue of the group. (As regards any dividends paid by T and received by S, S would have required to credit investment Account with the proportion of dividends paid out of the pre-acquisition balance. This is not the case for T's shares remain "at cost" in S's Balance Sheet.)
- (3) The procedure should be noted by which the Minority Interests S are credited in effect with $\frac{1}{4}$ of the Revenue Account balances as per the current Balance Sheets (£5,000 S + £1,000 T). They receive directly £800 which is $\frac{1}{4}$ of (£2,200 S + £1,000 T) The balance of S £2,800 (5,000 - 2,200) is the pre-acquisition balance which is deducted for the cost of the shares in T held by S and the resultant Net Cost of Control of T by S (Cr. £800) is allocated to the extent of $\frac{1}{4}$ to the Minority Interests S. The Minority Interests S therefore receive their $\frac{1}{4}$ share of the balance of S's Revenue Account £2,800 indirectly. Minority Interests S can be independently calculated by taking $\frac{1}{4}$ of the Net Assets of S and T thus:-

	S	T
Sundry Assets.. .. .	£ 17,000	£ 15,000
<u>Less: Creditors</u>	<u>6,000</u>	<u>2,000</u>
	£ 11,000	£ 13,000
	V	
	<u>£ 24,000</u>	
$\frac{1}{4}$ thereof	<u>£ 6,000</u>	

The position is more complex if a holding company acquires control of a subsidiary which already controls a sub-subsidiary. The holding company, in making the offer for the shares in the subsidiary, would take into account the book value of the holding in the sub-subsidiary as compared with its real value and would consider the trading results of the two already inter-related companies. After purchase, the holding company should regard as pre-acquisition profits included in the purchase price, not only the Revenue Account balance of the subsidiary at purchase date but also the subsidiary's share of the Revenue Account balance of the sub-subsidiary at the same date.

In subsequent Consolidated Statements of the new group of three members, the subsidiary should continue to capitalise the pre-acquisition revenue balance of the sub-subsidiary at the date of purchase of the sub-subsidiary, while the holding company should capitalise the figure as shown by, or estimated from, the accounts of the subsidiary at the subsequent purchase date, but the figure should be adjusted further to include the subsidiary's full share of the trading results of the sub-subsidiary between the two purchase dates. To the extent that dividends have been distributed from the trading profit of the sub-subsidiary, the subsidiary has already received them and they will be included in the subsidiary's Profit and Loss Account balance at the later purchase date. The balance of the subsidiary's profit, or when no dividends have been declared by the sub-subsidiary, the full trading result of the sub-subsidiary is the difference between its Revenue Account balance on the date the subsidiary was purchased and that balance on the earlier date when the sub-subsidiary was purchased. Thus, in effect, the pre-acquisition revenue balances as at the later purchase date, of both the subsidiary and the sub-subsidiary are capitalised by the new group.

An /

An illustration in which the sub-subsidiary is fully-owned will help to make this point clear.

S. bought all the shares in T. in 1940 when T's. balance on Revenue Account was estimated at £2,800 credit. H. bought $\frac{3}{4}$ ths of S. in 1942 when S's. balance on Revenue Account was estimated at £3,000 credit and T's. balance on Revenue Account was estimated at £5,000 credit. All shares are stated "at cost" in the books.

In the relative Consolidated Statement of the old group of S. and T., one would regard T's. 1940 Revenue balance £2,800 credit, as pre-acquisition and included in the purchase price. The capitalisation of this balance continues so long as S. holds the shares in T., for in theory S. should appropriate dividends received from T. to that amount, and with them credit Investment Account.

As T. was 100% owned by S. when H. acquired $\frac{3}{4}$ ths of S., H. will regard $\frac{3}{4}$ ths of all undistributed profits of S. and T. up to 1942, as capital theoretically included in the purchase price of S's. shares. The net result must be that the group capitalises $\frac{3}{4}$ ths of the credit balance of S. £3,000 and T. £5,000 as at 1942 i.e. $\frac{3}{4}$ ths of £8,000.

This is carried out in fact as follows:-

(1) S. will continue to capitalise T's. credit balance in 1940 for consolidation purposes £2,800

(2) H. will capitalise $\frac{3}{4}$ of S's. Revenue balance in 1942 taking into account S's. revenue interest in T.

As per S's. Accounts £3,000

Add S's. Revenue interest in T.

T's. credit balance in 1942 . . . £5,000

Less: " " " 1940 (which cannot be regarded as revenue by S) 2,800 2,200 5,200

£8,000

($\frac{3}{4}$ th thereof to be capitalised by the group).

H. therefore credits to capital $\frac{3}{4}$ ths of £5,200 and reduces the book value of investment in S. for consolidation purposes. S. likewise credits to capital £2,800 and thus reduces the book value of investment in T. The resultant Net Cost of Control of T. is passed on to H. to the extent of $\frac{3}{4}$ ths, so that the effect on the £2,800 is that

$\frac{3}{4}$ ths /

$\frac{3}{4}$ ths is capitalised by the new group. In all $\frac{3}{4}$ ths of £8,000 (5,200 + 2,800) is capitalised.

The above principle applies in all consolidations. It does not matter whether the revenue balances were debit or credit at either date, or whether the revenue balances had decreased in the interval between the two acquisition dates. For example, if T's credit balance in 1942 had decreased to £1,600 (instead of increased to £5,000) the group must capitalise $\frac{3}{4}$ ths of £4,600 (£3,000 S. and £1,600 T.). This is carried out as follows:-

(1) S. will continue to capitalise T's cr. bal. in 1940 £2,800

(2) H. must capitalize $\frac{3}{4}$ ths of S's. Rev. bal. in 1942, taking into account S's. rev. int. in T.

As per S's. A/cs	£3,000	
<u>S's. Rev. int. in T.</u>		
T's. cr. bal. in 1942 .	£1,600	
Less: " " " " 1940 (which cannot be regarded as revenue by S). .	2,800	
Decrease representing loss, or excess of divds. over profits earned, for period 1940 - 1942.....	Dr: <u>1,200</u>	1,800
		<u>£4,600</u>

The decrease of T's. Profit and Loss Account balance from £2,800 to £1,600 can be explained by either a trading loss incurred by T. in the intervening period, or an excess of dividends paid over profits earned by T. since 1940. An examination of T's. books will disclose which alternative is responsible for the decrease. It should be noted also that the shares in T. stand in S's. books "at cost". There is no credit to Investment Account of dividends received by S. and paid out of T's. profits earned prior to acquisition, so that if S. has adopted sound accounting principles, any dividend from T. must have been paid out of profits earned since acquisition (since 1940). As an example of an excess of dividends paid over profits earned, since acquisition, T's. Profit and Loss Account for 1940 - 42 might well have read as follows:-

Bal. /

Bal. at cr. in 1940	£2,800
Profit 1941	£1,500
<u>Less: Divd. declared and paid for 1941</u>	<u>1,400</u>
	<u>100</u>
	£2,900
<u>Less: 1942 loss . . .</u>	<u>1,300</u>
Bal. at cr. in 1942	<u>£1,600</u>

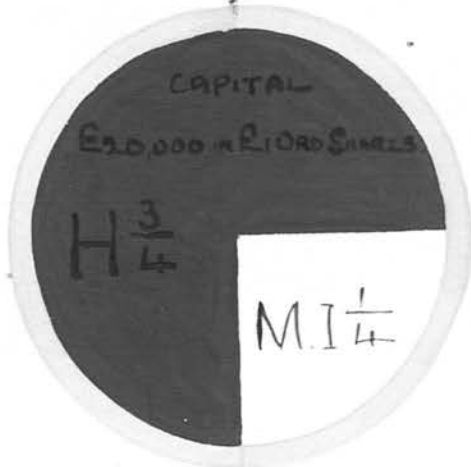
The 1941 divd. £1,400, being paid out of post-acquisition profits, can be legitimately credited to S's. P. & L. A/c. The post-acquisition profit for 1941 and 42 is £200 (£1,500-1,300) so that there is an excess of divds. paid over profits earned since acqn. The excess is £1,200.

EXAMPLE - 18.

H



$\frac{3}{4}$ BOUGHT 31/12/42



ALL BOUGHT 31/12/40



Example 18 - Subsidiary having a fully-owned Sub-subsidiary. The Subsidiary acquired after the Sub-subsidiary. Holdings bought at Market Price.

The summarised Balance Sheet of a group as at 31st December 1946, were - as per previous example.

S bought all T in 1940 when it was estimated from T's books that T's Revenue Account was credit	£ 2,800
H bought $\frac{3}{4}$ S in 1942 when it was estimated (a) from S's books that S's Revenue Account was credit	3,000
and (b) from T's books that T's Revenue Account was credit	<u>1,600</u>

SOLUTION

(a) The adjustments required in each company's accounts are:-

S (1) Revenue Account	Dr. £2,800
To Investment Account (in T)	£2,800

(Being T's Revenue Account balance in 1940 - pre-acquisition- when S bought all T)

H (1) Revenue Account	Dr. £1,350
To Investment Account (in S)	£1,350

(Being $\frac{3}{4}$ S's Revenue Account balance in 1942 - pre-acquisition - when H bought 15,000 shares in S ($\frac{3}{4}$) made up thus:-

Balance at credit of S in 1942 per S's books	£ 3,000
<u>Less: Amount of T's pre-acquisition balance 1940 which should have been capitalised (per S(1))</u>	<u>2,800</u>

Note: T's shares are at cost in S's Balance Sheet so that no dividends from T have been credited to Investment Account.

<u>Add: T's credit balance in 1942 falling to S</u>	<u>£ 200</u>
	<u>1,600</u>

S's true Revenue balance in 1942 £ 1,800

$\frac{3}{4}$ thereof to H. £ 1,350

(b) The aggregation of the adjusted Balance Sheets is:-

<u>ASSETS</u>	<u>Total</u>	<u>H</u>	<u>S</u>	<u>T</u>
Sundry Assets	£143,000	£111,000	£ 17,000	£ 15,000
<u>Investments at Adjusted Cost:</u>				
In S 15,000 shares.	17,650	17,650	-	-
T 12,000 shares.	11,200	-	11,200	-
	<u>£171,850</u>	<u>£128,650</u>	<u>£ 28,200</u>	<u>£ 15,000</u>

LIABILITIES

Capital	£132,000	£100,000	£ 20,000	£ 12,000
Creditors	28,000	20,000	6,000	2,000
Revenue Account.. .. .	11,850	8,650	2,200	1,000
	<u>£171,850</u>	<u>£128,650</u>	<u>£ 28,200</u>	<u>£ 15,000</u>

(c)/

ASSETS

Sundry Assets	£143,000
<u>Goodwill - Net Cost of Control to the group:</u>	
	By S <u>In T</u>
	By H In <u>S $\frac{S}{4}$</u>
Adjusted Cost	£ 11,200
Par	£ 17,650
	<u>12,000</u> <u>15,000</u>
<u>Less: Minority Interests S $\frac{1}{4}$</u>	Cr. £ 800 Dr 2,650
	<u>200</u> <u>-</u>
	Cr. £ 600 Dr 2,650
	<u>2,050</u>
	<u>£145,050</u>

LIA BILITIES

Share Capital H	£100,000
Creditors	28,000
<u>Revenue Account</u>	£ 11,850
<u>Less: Minority Interests S $\frac{1}{4}$ of ($2, \frac{S}{200} + 1, \frac{T}{1,000}$)</u>	<u>800</u> 11,050
<u>Minority Interests:</u>	<u>S $\frac{1}{4}$</u>
Capital	£ 5,000
Revenue Account	800
Net Cost of Control of T	200
	<u>6,000</u>
	<u>£145,050</u>

Notes:

- (1) The Minority Interests S valued at £6,000 is the same as in the previous example both being $\frac{1}{4}$ of ~~the~~ S's and T's Net Assets excluding all hidden Goodwill.
- (2) Note the calculation of the amount capitalised by a member H when another member (S) is purchased which already holds shares in yet another member (T).
- (3) T's balances on Revenue Account were in 1940 £2,800 Cr. when S acquired T
in 1942 £1,600 Cr. when H acquired S
in 1946 £1,000 Cr. on consolidation date.
The decreases must be due to either an excess of dividends paid over profits earned by T since acquisition or to losses incurred by T as in S's Balance Sheet the Investment in T remains "at cost".
If the decrease is due to an excess of dividends paid over profits earned, the dividends received by S have all been declared out of profits earned by T since acquisition since T's shares are at cost in S's books (The cost price would have been reduced by any dividend received by S from T so far as they were paid out of the pre-acquisition balance).
- (4) H and S have given the same prices for the shares as in the previous example although the financial positions of S and T have altered. The same price was taken so that the valuations would be worked out from similar 1946 Balance Sheets and so make possible a comparison of the two Consolidated Statements.

EXAMPLES — 19 AND 20.

H



$\frac{3}{4}$ BOUGHT — 1942



$\frac{2}{3}$ BOUGHT — 1940



Example 19 - Subsidiary having a partly-owned Sub-subsidiary. The Subsidiary acquired after the Sub-subsidiary.

The summarised Balance Sheets of a group as at 31st December 1946, were:-

		<u>ASSETS</u>		
		<u>H</u>	<u>S</u>	<u>T</u>
Sundry Assets..	.. .. .	£111,000	£ 21,667	£ 15,000
<u>Investments at cost;</u>				
In S	15,000 shares at 25/4d each	19,000	-	-
T	8,000 shares at 23/4d each	-	9,333	-
		<u>£130,000</u>	<u>£ 31,000</u>	<u>£ 15,000</u>

		<u>LIABILITIES</u>		
Share Capital (in £1 Ordinary shares) .. .. .	.. .. .	£100,000	£ 20,000	£ 12,000
Creditors. .. .. .	.. .. .	20,000	6,000	2,000
Revenue Account .. .. .	.. .. .	10,000	5,000	1,000
		<u>£130,000</u>	<u>£ 31,000</u>	<u>£ 15,000</u>

S bought 2/3rds T in 1940 when T had a credit balance on Revenue Account of £2,800
H bought $\frac{3}{4}$ S in 1942 when it was estimated.

- (a) From S's books that S had a credit balance on Revenue Account of £3,000
T's books that T had a credit balance on Revenue Account of £1,600

SOLUTION

- (a) The adjustments required in each company's accounts are:-

S (1) Revenue Account Dr. £1,867
To Investment Account (in T) £1,867

(Being 2/3rds T's credit balance £2,800 on Revenue Account in 1940 (pre-acquisition) when S bought 8,000 shares in T (2/3rds).

H (1) Revenue Account Dr. £1,650
To Investment Account (in S) £1,650

(Being $\frac{3}{4}$ S credit balance in 1942 - pre-acquisition - when H bought 15,000 shares in S ($\frac{3}{4}$) computed thus:-

Balance at credit of S in 1942 per S's books	£ 3,000
Add: 2/3rds of T's/balance in 1942 falling to S. 2/3rds of £1,600	1,067
Cr.	£ 4,067
Less: 2/3rds of T's credit balance in 1940 (pre-acquisition) which has now been capitalised by S 2/3rds of £2,800 (per S (1)).	1,867
	<u>£ 2,200</u>
$\frac{3}{4}$ thereof	<u>£ 1,650</u>

- (b) The aggregation of the adjusted Balance Sheets, is:-

		<u>Total</u>	<u>H</u>	<u>S</u>	<u>T</u>
<u>ASSETS</u>					
Sundry Assets..	.. .. .	£147,667	£111,000	£ 21,667	£ 15,000
<u>Investments at Adjusted Cost:</u>					
In S	15,000 shares.. .. .	17,350	17,350	-	-
T	8,000 shares.. .. .	7,466	-	7,466	-
		<u>£172,483</u>	<u>£128,350</u>	<u>£ 29,133</u>	<u>£ 15,000</u>

LIABILITIES/

(b) Continued.

VI (20)

							<u>LIABILITIES</u>			
							<u>Total</u>	<u>H</u>	<u>S</u>	<u>T</u>
Capital	..	..	..	..	..	..	£132,000	£100,000	£ 20,000	£ 12,000
Creditors	..	..	..	..	..	..	28,000	20,000	6,000	2,000
Revenue Account	..	..	..	..	..	..	12,483	8,350	3,133	1,000
							<u>£172,483</u>	<u>£128,350</u>	<u>£ 29,133</u>	<u>£ 15,000</u>

(c) The Consolidated Statement, is:-

							<u>ASSETS</u>					
Sundry Assets	..	..	..	..	..	..	..	..	..	£147,667	
<u>Goodwill - Net Cost of Control to group:</u>												
							<u>By T</u>	<u>S</u>	<u>In</u>	<u>By S</u>	<u>H</u>	<u>In</u>
							<u>2/3rds</u>	<u>S</u>	<u>2/3rds</u>	<u>S</u>	<u>1/4</u>	
Adjusted Cost	£ 7,466	£ 17,350				
Par	8,000	15,000				
							Cr. £	534	Dr	2,350		
<u>Less: Minority Interests:</u>												
S $\frac{1}{4}$	134	-				
							Cr. £	400	Dr	2,350	1,950	
											<u>£149,617</u>	

							<u>LIABILITIES</u>				
Share Capital H	..	..	..	..	..	..	..	..	..	£100,000
Creditors	..	..	..	..	..	..	..	..	..	28,000
Revenue Account	..	..	..	..	..	..	..	..	£ 12,483	
<u>Less: Minority Interests:</u>											
T $\frac{1}{3}$ rd of £1,000.	..	..	..	..	..	..	£ 333			
S $\frac{1}{4}$ of (S + $\frac{2}{3}$ rds T )	..	..	..	..	..	..	950	1,283	11,200	
<u>Minority Interests:</u>											
							<u>S</u>	<u>1/4</u>	<u>T</u>	<u>1/3rd</u>	
Capital	..	..	..	..	..	..	£ 5,000	£ 4,000		
Revenue Account.	..	..	..	..	..	..	950	333		
Net Cost of Control of T..	..	..	..	..	..	..	Cr. 134	-		
							£	6,084	£	4,333	10,417
											<u>£149,617</u>

Notes:

(1) The Minority Interests of S and T can be checked by an independent calculation of their share of the Net Assets.

(a) According to T's Balance Sheet T's shares are worth £1.1.8d each, 4,000 shares at £1.1.8d = £4,333 (as above).

(b) S's shares are worth £1.4.4d thus:-

S's Sundry Assets.. £ 21,667
 8,000 shares in T at T's Balance Sheet price £1.1.8d 8,667

£ 30,334

Less: Creditors 6,000£ 24,334 £1.4.4 per share

5,000 shares at £1.4.4d. = £6,084.

(2)/

Notes (Continued)

- (2) In the price of 25/4d per share given by H for S's shares, there is included the Hidden Goodwill of S and also 2/3rds of that of T in so far as the latter is not reflected already in the book value of the "Investment in T 8,000 shares £9,333" in S's Balance Sheet. It is not necessary to obtain details of this division for the correct compilation of the Consolidated Statement.

T's Hidden Goodwill as valued by S in 1930 can be arrived at from the purchase price of 23/4d for T's shares.

Value of 8,000 shares in T at 23/4d as purchased by S	£ 9,333
Value of 12,000 shares in T at 23/4d is therefore	£14,000
That is to say the total value of T in 1930 is -	£14,000
Made up thus - Share Capital	£ 12,000
Revenue Account - Cr. Balance in 1930	2,800
	<u>£ 14,800</u>
<u>Less: Allowance for T's Badwill (balance)</u>	800
	<u>14,000</u>

Now assume that in 1942 when H bought S's shares for 25/4d each, H considered T's Badwill to have altered to say £1,100. It is now possible to arrive at S's Hidden Goodwill in 1942 thus:-

Total value of T in 1942 is:-

Share Capital	£ 12,000
Revenue Account - Cr. balance in 1942	1,600
	<u>£ 13,600</u>
<u>Less: T's Badwill as computed by H in 1942</u>	1,100
	<u>£ 12,500</u>

Value of 2/3rds T in 1942 (8,000 shares held by S) is ..	£ 8,333
Cost of 8,000 shares in T per S's Balance Sheet	9,333

Reserve required by S to cover fall in value of T's shares. £ 1,000

H buys S's shares at 25/4d in 1942 -

Value of S in 1942 is therefore 20,000 @ 25/4d.	£25,333
Made up thus - Share Capital	£ 20,000
Revenue Account - Cr. balance in 1942	3,000
	<u>£ 23,000</u>
<u>Less: Reserve required by S for fall in value of 8,000</u> <u>shares in T</u>	1,000
	<u>£ 22,000</u>
Balance being S's Hidden Goodwill as valued by H	<u>3,333</u> <u>25,333</u>

The Net Cost of Control to H is:-

S $\frac{3}{4}$ of S's Hidden Goodwill £3,333	£ 2,500
T through S $\frac{3}{4}$ of 2/3rds of T's Hidden Badwill £1,100 in 1942 minus	550

Agreeing with figure in Consolidated Statement .. £ 1,950

This demonstrates that for the purposes of preparing the Consolidated Statement it is unnecessary to go into such details. All one requires is the ^{cost} price of the shares and the balances at credit (or debit) of Revenue Account at the relative dates.

- (3) See note (3) in previous example.

Example 20 - Subsidiary having a partly-owned Sub-subsidiary. Cost of Investments written down to Adjusted Cost, i.e. cost less full pre-acquisition revenue balances:

Let it be assumed that in the previous example T since 1940 and S since 1942 have both been earning good profits and declaring good dividends and S's and H's policy was to credit dividends to Investment Account to the extent of reducing book values to Cost, less the pre-acquisition balance.

From T's dividend S should have capitalised the profits earned prior to purchase ($\frac{2}{3}$ of £2,800 = £1,867) and the book value of T's shares would be reduced by £1,867 to £7,466 and S's Profit and Loss Account reduced by a similar amount.

From S's dividends H should have capitalised S's profits earned prior to purchase in 1942 ($\frac{5}{4}$ of $\left\{ (3,000 - 1,867) + \frac{2}{3} \text{ of T's balance 1942 } \right\}$ = £1,650. The book value of S's shares and H's Profit and Loss Account would both be reduced by £1,650, as at 31st December 1946. The Balance Sheets of the group would then be -

	<u>ASSETS</u>								<u>H</u>	<u>S</u>	<u>T</u>
Sundry Assets..	£111,000	£ 21,667	£ 15,000
Investments at cost, less pre-acquisition balances -											
In S 15,000 shares	17,350	-	-
T 12,000 shares	-	7,466	-
									£128,350	£ 29,133	£ 15,000
									£128,350	£ 29,133	£ 15,000

	<u>LIABILITIES</u>								<u>H</u>	<u>S</u>	<u>T</u>
Share Capital (in £1 Ordinary shares)	£100,000	£ 20,000	£ 12,000
Creditors.	20,000	6,000	2,000
Revenue Account	8,350	3,133	1,000
									£128,350	£ 29,133	£ 15,000
									£128,350	£ 29,133	£ 15,000

The narrative re pre-acquisition balance would have read -

S bought $\frac{2}{3}$ of T in 1940 when the Revenue Account balance estimated from T's Accounts was Cr. £2,800.
H bought $\frac{5}{4}$ of S in 1942 when the Revenue Account balance estimated from S's Accounts was Cr. £1,133 (note reduction) $3,000 - 1,867$
and when the Revenue Account balance estimated from T's Accounts was Cr. £1,600.

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It will be observed that the Balance Sheets above are the same as the adjusted Balance Sheets of the previous example so that the preparations of the Consolidation is straightforward. The Statement is of course, the same as that of the preceding example.

If T and S had declared no dividends owing to poor trading results, the pre-acquisition balances must be still capitalised so that the same Consolidation is obtained irrespective of entries in the financial books. The fall in T's Revenue balance from £2,800 in 1940 to £1,600 in 1942 and to £1,000 as at 31st December 1946 would then be accounted for by post-acquisition losses which must be borne by the parties interested.

To generalise, in practice it is unnecessary to go into details of dividends received and credited to Revenue, but it is important to ascertain what dividends are credited to Investment Account as these amounts reduce or extinguish the pre-acquisition balances to be capitalised when one is consolidating Accounts.

EXAMPLE - 21.

H



$\frac{3}{4}$ BOUGHT - 1942.



S



$\frac{2}{3}$ BOUGHT - 1940



The summarised Balance Sheets of a group as at 31st December 1946 were:-

	<u>ASSETS</u>		
	<u>H.</u>	<u>S.</u>	<u>T.</u>
Sundry Assets	£ 120,000	£13,925	£ 15,000
<u>Investments:</u>			
In S. at cost (15,000 Shares)	12,000		
In T. at cost less £500 Dividend (credited 8,000 Shares)		9,500	
Revenue Account		2,575	
	£ 132,000	£26,000	£ 15,000

	<u>LIABILITIES</u>		
Share Capital (in £1 Ordinary Shares)	£100,000	£ 20,000	£ 12,000
Creditors	20,000	6,000	2,000
Revenue Account	12,000	-	1,000
	£132,000	£ 26,000	£ 15,000

S. acquired 2/3rds of T. in 1940 when the Revenue Account balance estimated from T's books was Cr. £ 1,200

H. acquired 3/4 of S. in 1942 when the Revenue Account balance estimated from S's books was Dr. 2,000

and when the Revenue Account balance estimated from T's books was Cr. 900

On acquisition date H. considered S's Fixed Assets overvalued by £1,500. S's books were not adjusted for this.

In 1940 S. credited to Investment Account £500 - a portion of a dividend received from T. paid out of pre-acquisition Profits.

Solution:

(a) The adjustments required in each Company's Accounts are:-

S. (1) Revenue Account Dr. £300
 To Investment Account (in T.) £300

(Being portion of T's Revenue Account balance at 1940 - pre-acquisition - when S. bought 8,000 Shares in T. (2/3rds); computed thus:-
 2/3rds Rev. Balance of T. in 1940 (£1,200 Cr.) £ 800
 Less: Dividend credited to Invest. A/c. 500
Balance to be capitalised. £ 300)

S. (2) Capital Reserve Dr. £1,500
 To Fixed Assets £1,500

(Being overvaluation of S's Assets in 1942 when H. acquired control).

H. (1) Investment Account (in S.) Dr. £1,275
 To Revenue Account £1,275

(Being 3/4ths S's true debit balance on Revenue A/c in 1942 - pre-acquisition - when H. bought 15,000 Shares in S. (3/4ths) computed thus:-
 S's Debit Revenue balance in 1942 per S's books, Dr. £2,000
Add: 2/3rds of T's credit balance in 1940 to the extent not capitalised in S's books (see S. (1)) 300
Forward Dr. £2,300

Less/

H. (1) (Contd.)	<u>Forward</u>	£ 2,300
<u>Less: 2/3rds of T's credit balance in 1942</u>		
falling to S. -2/3rds of £900		600
<u>S's true debit balance in 1942.. ..</u>		<u>£ 1,700</u>
H's share thereof $\frac{3}{4}$ ths	Dr.	<u>£1,275</u>

(b) The aggregation of the adjusted Balance Sheets is:-

<u>ASSETS</u>				
	<u>Total</u>	<u>H.</u>	<u>S.</u>	<u>T.</u>
Sundry Assets,	£147,425	£120,000	£ 12,425	£ 15,000
<u>Investments at Adjusted Cost:</u>				
In S. 15,000 Shares	13,275	13,275		
In T. 8,000 Shares	9,200		9,200	
Capital Reserve	1,500		1,500	
Revenue Account			2,875	
	<u>£171,400</u>	<u>£133,275</u>	<u>£ 26,000</u>	<u>£ 15,000</u>

<u>LIABILITIES</u>				
Share Capital	£132,000	£100,000	£ 20,000	£ 12,000
Creditors	28,000	20,000	6,000	2,000
Revenue Account	11,400	13,275	-	1,000
	<u>£171,400</u>	<u>£133,275</u>	<u>£ 26,000</u>	<u>£ 15,000</u>

(c) The Consolidated Statement is:

<u>ASSETS</u>				
Sundry Assets				£147,425
<u>Goodwill - Net Cost of Control to the Group:</u>				
		<u>By S.</u>	<u>By H.</u>	
		<u>In T. 2/3rds</u>	<u>In S. 3/4ths</u>	
Adjusted Cost		£ 9,200	£13,275	
<u>Add: 3/4ths Dr. Balance on Cap. Res.</u>			1,125	
			<u>£14,400</u>	
Par.		8,000	15,000	
		Dr. £ 1,200	£ 600 Cr.	
<u>Less: Min. Interests S. 1/4th.</u>		300		
		Dr. £ 900	£ 600 Cr.	300
<u>Capital Reserve S.</u>			Dr. £ 1,500	
To Min. Ints. S. 1/4th.. ..			£ 375	
H.			<u>1,125</u>	
			<u>1,500</u>	
				<u>£147,725</u>

<u>LIABILITIES</u>				
Share Capital H.				£100,000
Creditors				28,000
Revenue Account:				£11,400
<u>Less: Min. Interests:</u>				
T. 1/3rd of 1,000.. ..			£ 333	
			S. 1/4th (£2,875 Dr. - 2/3rds x 1,000)	
			552	219
				11,619
<u>Minority Interests:</u>			<u>S. 1/4th</u>	<u>T. 1/3rd</u>
Capital			£5,000	£4,000
Revenue Account.. .. .			..Dr. 552	333
Capital Reserve.. .. .			..Dr. 375	
Net Cost of Control of T... ..			..Dr. 300	
			<u>£3,773</u>	<u>£4,333</u>
				8,106
				<u>£147,725</u>

Notes:/

Notes:

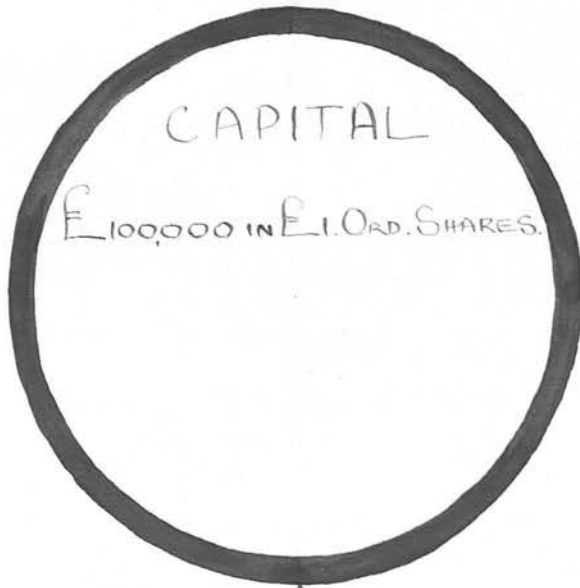
- (1) It should be observed that the Balance Sheet which is adjusted is:-
- (a) For the pre-acquisition Revenue balance - The Balance Sheet with the Investment.
- (b) For Assets re-valued - The Balance Sheet with the Assets.
- (2) The Capital Reserve Dr. £1,500 which arises from the writing down of S's Assets, remains in the aggregation and is then dealt with by an allocation to the Minority Interests S. of their share - Dr. £375 - The balance falls to H. - Dr. £1,125, and is transferred to the adjusted cost of S's shares held by H. (The over-valuation would reduce the offer made by H.)
- (3) The Minority Interests can be reconciled thus:-
- (a) T. Shares per T's Balance Sheet are worth £1. 1.8d each.
4,000 Shares at £1. 1. 8d = £4,333.
- (b) S. Shares in S's Balance Sheet are worth 15/1.1 each, thus:-

S's Assets per Balance Sheet ..	£13,925	
<u>Less: Overvaluation of Fixed Assets</u>	<u>1,500</u>	
	£12,425	
Investment in T. at T's Balance Sheet price - 8,000 Shares at £1. 1. 8d each	<u>8,667</u>	
	£21,092	
<u>Less: Creditors</u>	<u>6,000</u>	
	<u>£15,092</u>	for 20,000 Shs. =
	<u>15/1.1d per Sh.</u>	for 5,000 Shs. =
		£3,773.

It should be noted that the Minority Interests share in any re-valuation of Assets as it is desirable to show the Asset re-valued at the correct figure in the Consolidated Statement.

EXAMPLE - 22.

H



$\frac{3}{4}$ BOUGHT - 1938



\$



$\frac{2}{3}$ BOUGHT - 1939.



Subsidiary having a partly-owned Sub-subsidiary. Shares bought at a premium but Sub-subsidiary incurring current losses. Shares written down in value.

The summarised Balance Sheets of a group as at 31st December 1946 are:-

						<u>ASSETS</u>		
						<u>H.</u>	<u>S.</u>	<u>T.</u>
Sundry Assets	..	..	..	..	..	£112,000	£ 20,000	£ 11,000
Investments:								
In S. 15,000 Shares	..	..	..	..	..	18,000		
" T. 8,000 Shares	..	..	..	..	..		6,800	
Revenue Account	..	..	..	..	..			3,000
						<u>£130,000</u>	<u>£ 26,800</u>	<u>£ 14,000</u>
						<u>LIABILITIES</u>		
Share Capital (in £1 Ord. Shares)..	..	..	..	..	..	£100,000	£ 20,000	£ 12,000
Creditors	..	..	..	..	..	20,000	6,000	2,000
Revenue Account	..	..	..	..	..	10,000	800	-
						<u>£130,000</u>	<u>£ 26,800</u>	<u>£ 14,000</u>

Notes:

- (1) H. bought $\frac{3}{4}$ ths S. in 1938. The Investment in H's Balance Sheet is valued at cost less H.'s full share of S's pre-acquisition revenue balance.
- (2) S. bought $\frac{2}{3}$ rds T. in 1939 at a cost of £ 10,400
There has been credited to Investment Account in S's books:-
- (1) Dividends received from T. which represent S's full share of T's pre-acquisition Rev. Bal. £ 400
- (2) Provision made from S's Profits in 1946 to cover all losses made by T. to 31/12/46 and any balance remaining to be used for depreciation of T's shares 3,200 3,600
Book value per S's Balance Sheet £ 6,800

Solution:

(a) The adjustment required in S's Accounts is:

S.(1) Investment Account (in T.)	..	..	Dr. £3,200
To Special Reserve Account	..	..	<u>£ 3,200</u>
(Being amount written off value of Shares in T. now transferred to Special Reserve Account).			

(b) The aggregation of adjusted Balance Sheets is hardly necessary.

(c) The Consolidated Statement is:-

						<u>ASSETS</u>		
Sundry Assets	..	..	..	..	..	..	..	£143,000
Goodwill - Net Cost of Control to the Group:								
<u>less sums written off:</u>								
						<u>By S.</u>	<u>By H.</u>	
						In T. $\frac{2}{3}$ rds	In S. $\frac{3}{4}$ ths	
Adjusted cost	..	..	..	..	..	£ 10,000	£ 18,000	
Par	..	..	..	..	..	8,000	15,000	
						<u>£ 2,000</u>	<u>£ 3,000</u>	
<u>Less: Balance of Special Res. A/c.</u>						<u>1,200</u>		
						£ 800		
<u>Less: Min. Interests S. $\frac{1}{4}$th</u>	..				..	<u>200</u>		
						<u>£ 600</u>	<u>£ 3,000</u>	3,600
								<u>£146,600</u>

LIABILITIES /

(c) The Consolidated Statement (Contd.)

LIABILITIES

Share Capital H.	.. .. .	£100,000	
Creditors	.. .. .	28,000	
<u>Revenue Account:</u>			
T.	.. .. .	Dr. £ 3,000	
Less: Minority Interests, T. $\frac{1}{3}$ rd.	.. .. .	Dr. 1,000	
Bal. transferred to Special Res. A/c.	.. .. .	£ 2,000	
S.	.. .. .	£ 800	
Less: Minority Interests, S. $\frac{1}{4}$ th	.. .. .	200	
		To H.	£ 600
H.	.. .. .	£ 10,000	10,600
Special Reserve Account S.	.. .. .	£ 3,200	
Less: T's loss falling to S. transferred hereto	.. .. .	2,000	
		<u>Balance to Goodwill</u>	<u>£ 1,200</u>
<u>Minority Interests:</u>			
		S. $\frac{1}{4}$ th	T. $\frac{1}{3}$ rd
Capital	.. .. .	£ 5,000	£ 4,000
Revenue Account.	.. .. .	200	1,000 Dr.
Net Cost of Control of T.	.. Dr.	200	
		<u>£ 5,000</u>	<u>£ 3,000</u> 8,000
			<u>£146,600</u>

Note: As regards the debit of £2,000 to Special Reserve, reference should be made to Examples 9 and 10. The adjustment prevents T's loss to date being debited to Group revenue twice; it has already been debited in S's Profit and Loss Account (see S's Investment Account details).

(4) Fixed assets of the subsidiary: A re-valuation of the fixed assets of S. on the date S. purchased shares in T. will have the same effect on the purchase price as a re-valuation of goodwill, namely, the valuation of the fixed assets in S's Balance Sheet would alter. In the consolidated Statement of the new group of S. & T. the treatment of a re-valuation of a fixed asset of S. will, however, have that of goodwill since the figure of minority interests is affected. The debit must be written down or written up to the latest re-valuation figure.

Re-valuation of Assets of a sub-subsidiary when a holding company purchases a subsidiary which controls the sub-subsidiary.

The previous section has dealt with the effect of the revenue position of a sub-subsidiary, on the purchase price of the shares of its controlling company. There now falls to be considered another factor which affects this purchase price, namely the re-valuation of assets of the sub-subsidiary. For example, if H. purchases a controlling interest in S., and S. already controls T., then T. is a sub-subsidiary of the new group and a re-valuation of T's. assets by H. on the date H. purchases S's. shares, will affect the purchase price of S's. shares. The assets revalued may be either (1) Goodwill or (2) Fixed Assets such as Property, Plant, etc.

- (1) Goodwill of the sub-subsidiary. A different valuation will usually occur since it is unlikely that the Goodwill of T. will remain at the same value as that at the earlier date when S. purchased control of T. This latter value is already reflected in the book value of "Investment in T." appearing in S's. Balance Sheet. The new value of T's. Goodwill has the effect of altering the value of this asset of S. (i.e. the Investment in T.), by the difference between the old and new value of T's. Goodwill and to the extent S. owns T. No special adjustment requires to be made during the preparation of the Consolidated Statement of the new group. The correct proportion of the difference in valuation of T's. Goodwill will automatically appear under Net Cost of Control, since the Net Cost of Control of S. is the difference between par and the cost price (of S's. shares) as adjusted for pre-acquisition balances. This point is brought out in a practical way in note 2 of Solution to Example 19. The Minority Interests are not affected since it is a principle of consolidation that all hidden Goodwill is excluded from the Minority Interests valuation. (In this connection hidden Goodwill is, of course, Goodwill not appearing in the Balance Sheet or where a Goodwill figure exists in the Balance Sheet, it is the difference between the actual valuation and the Balance Sheet value, plus or minus as the case may be).
- (2) Fixed Assets of the sub-subsidiary. A re-valuation of, say, T's. Property by H. on the date H. purchased shares in S., would have the same effect on the purchase price as a re-valuation of Goodwill, namely, the valuation of "Investment in T." in S's. Balance Sheet would alter. In the Consolidated Statement of the new group of H. S. and T., the treatment of a re-valuation of a fixed asset of T. differs, however, from that of Goodwill since the figure of Minority Interests is affected. The asset must be written down or written up to the later re-valuation figure /

figure by a corresponding consolidation entry to Capital Reserve and thereafter the normal consolidation procedure is followed (Example 29 (b) Chapter VIII demonstrates this point). Any re-valuation made at the earlier date when S. bought T. is of no moment to the new group, but would, of course, be used for the Consolidated Statement of the two members S. and T. up to the date of formation of the new group.

(a) Adjustments to Balance Sheet

- (1) The assets and liabilities of the constituent order, with the acquisition of the subsidiary, should be valued at the date of acquisition, followed by the revaluation of the assets and liabilities of the constituent order.
- (2) The assets and liabilities of the constituent order should be valued at the date of acquisition, followed by the revaluation of the assets and liabilities of the constituent order.
- (3) All provisions of the constituent order should be valued at the date of acquisition, followed by the revaluation of the assets and liabilities of the constituent order.
- (4) Summary /
- (5) /

Summary of full procedure of Consolidation.

Apart from the special treatment of the Net Cost of Control of a sub-subsidiary and of the pre-acquisition revenue balance of a subsidiary which holds shares in a sub-subsidiary, the Consolidated Statements of a group which includes a sub-subsidiary, are prepared by the application of the principles as used in the case of a simple group. In order that the reader may orientate his thoughts on the whole subject at this point, a summary of the full recommended procedure is given.

Summary of full procedure (duplicated in Appendix III)

(a) Adjustments to be made in each member's legal Balance Sheet.

Note: Members should be dealt with in a convenient order, which will be found to be according to acquisition dates. The accounts of the 1st member purchased should be adjusted in the first place, followed by the adjustment of the accounts of the 2nd member purchased and so on.

- (1) The items included under the various headings of each member's Balance Sheet should be examined and figures transferred and headings altered so that all accounts are stated on a uniform basis. Thus, like will be added to like, when the adjusted Balance Sheets are aggregated.
- (2) The Profit and Loss Account and General Reserve balances should be slumped under the heading "Revenue Account".
- (3) All Preference dividends due to date should be accrued (less tax, of course). Where any Preference Shares are held by other members, the amount receivable should be accrued and will form a contra item.

Contra Items.

- (4) Amounts due to or by other members, which items may be included in the legal Balance Sheet under Debtors, Creditors, Loans, Bills Receivable or Payable, Dividends outstanding, etc., should be shown under separate headings. Such amounts should be agreed with those shown by other members.

- (5) Where Preference and/or Ordinary Dividends receivable from or payable to other members, are accrued in either Balance Sheet, adjustment should be made so that the treatment is consistent in all adjusted Balance Sheets. This is carried out either by the writing back of all accruals or by the accruing of the dividends where necessary; the latter method should be adopted for Preference Dividends so that the adjusted Revenue Account balance invariably represents a balance which falls to Ordinary shareholders only. The figures for accrued dividend should be stated in the adjusted Balance Sheet either all gross without deduction of tax, or all net.

Adjustment of Assets.

- (6) Where fixed assets are re-valued by a member when acquiring control, the assets should be written up or written down in the Balance Sheet of the member which owns the assets; the corresponding entry is a credit or debit to a Capital Reserve Account. It is immaterial whether this adjustment results in a net credit or net debit balance on Capital Reserve Account. The balance on Capital Reserve Account appears in the adjusted Balance Sheet and is dealt with at a later stage. The amount of the adjustment is the current over or under-valuation (called the valuation difference) at the date of the Consolidated Statement. This applies to wasting assets. The current valuation difference will be the original difference at acquisition date less depreciation to date at the rate written off by the group on the relative asset.
- (7) Depreciation adjustments necessary owing to inadequate or excessive depreciation written off in the books of a member should be adjusted by a debit or credit to Revenue Account of the member which owns the asset. (Depreciation on the valuation difference /

difference under (6) above, is not adjusted in the Revenue Account. It is dealt with by taking the current valuation difference at the date of the Consolidated Statement as mentioned under (6) above. The amount of the consolidation adjusting entry will therefore decrease each year).

- (8) Where floating assets are re-valued by a member when acquiring control, no adjustment should be made during the process of consolidation except in the one case where at acquisition date there is an under-valuation which has since been corrected in the financial books of the subsidiary by an ~~increase~~ ⁱⁿ of profits. In this case the holding company's account should be adjusted by a debit to Revenue Account and a credit to "Investment in subsidiary" by the amount of the under-valuation.
- (9) Unrealised profit on stock from the group's viewpoint, sold by one member and on hand at Balance Sheet date to the purchasing member, should be provided for by the creation of a stock reserve by the holding company and a corresponding debit to the Reserve Account of the holding company, unless the rights of Minority Interests may be affected ^{in which case} ~~where~~ profit requires to be written off in total in the particular subsidiary's accounts.
- (10) Investments in other members, irrespective of the size of the holding, should be adjusted consistently throughout to what has been called "Adjusted Cost" which is cost price adjusted for the relative proportion of all pre-acquisition revenue balances. The corresponding entry is a debit (pre-acquisition profits) or a credit (pre-acquisition losses) to the Revenue Account of the member holding the shares.

Where shares have been written down in value by appropriations from a member's own profits, the shares should be written up so as to /

to appear at "Adjusted Cost". The corresponding entry is a credit to Special Reserve Account.

(b) Aggregation of the Adjusted Balance Sheets.

The Balance Sheets as adjusted (1 - 10 above) should be stated in columnar form and each balanced. After the cancellation of the contra items, the Balance Sheets should be aggregated. Additional headings such as "Cash (or Goods) in Transit" may be required. The question of whether the members are fully or partly owned is ignored in this aggregation.

(c) Compilation of the Consolidated Statement from the Aggregation of Adjusted Balance Sheets.

The adjustments carried out at this stage are (a) to give the Minority Interests their share of any subsidiary or sub-subsidiary and (b) to set off the "Adjusted Cost" of shareholdings against par value and so arrive at the Net Cost of Control to the group.

(a) Minority Interests. (1) Share Capital. The Share Capital held by outside shareholders in each company is transferred to Minority Interests.

(2) Capital Reserve. The Minority Interests of each member with a Capital Reserve, should be allocated their share of any debit or credit balance on Capital Reserve and the balance transferred to the member entitled thereto by the writing up (debit balance on Capital Reserve) or writing down (credit balance on Capital Reserve) of the "Adjusted Cost" of the shares held.

(3) Revenue Account. The Minority Interests of each member should be allotted their proportion of the member's adjusted Revenue Account balance after taking into account the share of any other member's adjusted Revenue Account, falling to that member (e.g. when a subsidiary holds shares in a sub-subsidiary).

(4) Net Cost of Control. The Minority Interests of a subsidiary which holds shares in another member, are allocated their share of the Net Cost of Control of that other member (see below).

(b) Net /

- (b) Net Cost of Control to the group. The value of shares held in other members by each member, as already adjusted for pre-acquisition revenue balances (A.10 above) and Capital Reserve (C.2 above) is set off against par value in each case; the difference, Net Cost of Control by each member, is shared where necessary with the Minority Interests of the member which holds the shares. The balance of the Net Cost of Control of each member to the holding company gives in the aggregate the Net Cost of Control to the group. In the Consolidated Statement this is shown as Goodwill, if a debit balance, and as Capital Reserve, if a credit balance.

After these adjustments the only Share Capital not dealt with is that of the principal holding company. This is the group's Share Capital in the Consolidated Statement. The other figures in the Consolidated Statement are taken direct from the aggregation.

Thus the draft Consolidated Statement is arrived at. One further later adjustment is to split the Revenue Account between General Reserve and Profit and Loss Account according to the wishes of the controllers of the group. Depreciation adjustments debited to Revenue Account should be charged to General Reserve, while those credited to Revenue Account should be shown under "Special Reserve created from depreciation written off in the financial books by members in excess of group requirements."

It might be well to emphasize the features of a Consolidated Statement prepared according to the above principles.

- (1) Revenue Account, (Profit and Loss Account, General and Special Reserve).

This represents the undistributed profits of the holding company together with the relative proportions of those of subsidiaries and sub-subsidiaries, since the acquisition dates only.

- (2) Minority Interests.

This is the share of the Net Assets in the adjusted Balance Sheets of the subsidiary or sub-subsidiary which belong to members outside the group. The figure includes Goodwill only in so far as it appears as an asset in the Balance Sheet of the member - all "hidden" Goodwill of subsidiaries and sub-subsidiaries is excluded. On the other hand where assets /

assets such as Property, Plant, etc., have been re-valued, these re-valuation figures appear in the Adjusted Balance Sheets and the Minority Interests are affected.

(3) Net Cost of Control to the group.

This is the actual cost to the group of "hidden" Goodwill or "Badwill" of all subsidiaries. It is the excess of the purchase price of the shares, as adjusted for asset re-valuation, and pre-acquisition revenue balances, over par value in so far as the burden falls on the group, i.e. only to the extent that the shares in subsidiaries and sub-subsidiaries have been effectively acquired.