

FOREIGN AND NATIONAL ENTERPRISES

(Volume V)

ALLOCATION ACCOUNTING FOR THE TAXABLE INCOME OF INDUSTRIAL ENTERPRISES

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NOTICE.

The collection of which this work is the fifth volume contains the results of an enquiry undertaken under the auspices of the Fiscal Committee of the League of Nations. The purpose of that enquiry was to provide the Committee with the necessary documentation for the framing of a draft Convention for the Prevention of the Double Taxation of Business Income. ¹

The work so undertaken involved, in the first place, a survey of the income tax law of a number of countries, with particular reference to the practice followed in each of them for the allocation or apportionment of the income of enterprises doing business in more than one country. The results of that part of the enquiry are published in the first three volumes of this collection. ²

A comparison of the data contained in these volumes dealing with the main problem involved, — *i.e.*, the allocation of business income — is made by Mr Mitchell B. CARROLL, who had been entrusted with the enquiry, in a fourth volume ³ which also outlines the authors practical conclusions as to the rules of allocation which would seem most adequate to prevent the double taxation of business income. The purpose of the present volume is to discuss some of the accounting aspects of the methods of allocation described in the preceding volume.

¹ The draft Convention was adopted on June 26th, 1926 ; see the Report to the Council on the work of the fourth session of the Fiscal Committee (document C.399.M.204.1933.A.II).

² The first volume was published in 1932 under the title of "Taxation of Foreign and National Enterprises in France, Germany, Spain, the United Kingdom and the United States" (document C.73.M.38.1932.II.A). The two succeeding volumes are appearing at the same time as the present study under the title "Taxation of Foreign and National Enterprises — Volume II : Austria, Belgium, Czechoslovakia, Free City of Danzig, Greece, Hungary, Italy, Latvia, Luxemburg, Netherlands, Roumania and Switzerland" (document C.425.M.217.1933.II.A) and " Volume III: British India, Canada, Japan, Mexico, Netherlands East Indies, Union of South Africa, States of Massachusetts, of New York and of Wisconsin " (document C.425(a).217(a).1933.II.A).

³ Taxation of Foreign and National Enterprises, Volume IV, "Methods of Allocating Taxable Income" (document C.425(b).M.217(b).1933.II.A).

PREFACE.

In making this study, the fixing of proper limits to its scope has constituted a major problem. Place accounting or separate accounting which provides for the allocation of profit on a geographical basis is so new and the opportunities for research are so unlimited that the investigator is constantly tempted to stray too far afield. From the beginning, however, it was clear that no single solution would apply to manufacturing and mercantile concerns, railroads, banks, and insurance companies alike, and that the special problems relating to such different types of businesses could not be adequately covered in a report of this nature. Since the allocation of profit on goods manufactured in one country and sold in another was conceded to be the most pressing problem, this study has been restricted to industrial and commercial enterprises, principally the former. A further limitation was effected by acting on the assumption that for accounting and tax purposes a subsidiary corporation must be treated either as an independent concern or as a branch. If the subsidiary is really autonomous, there would seem to be no reason why its taxable income should not be determined by the methods which apply to independent concerns. If the subsidiary, however, is not autonomous in fact, it must be regarded essentially as a branch, and the accounting methods hereafter described will generally apply.

The limits fixed for this study suggest the fields for further work. The problem of allocating profit to an assembly plant of a foreign automobile manufacturing company is so different from the problem of allocating profit to an establishment engaged in the production of some basic raw material that accounting methods must vary widely. No general scheme of allocation which fails to recognise such differences can be satisfactory. Methods for allocating profit to subsidiary companies should also be more fully studied. While it is, in general, true that subsidiaries must be regarded either as separate business entities or as branches, special problems in connection with dividends, losses and other features nevertheless arise. The importance of this form of organisation is in itself a sufficient reason for further investigation. Finally, much work should be devoted to the theoretical aspects of the subject. It is probable — indeed, it is practically certain — that profit can never be allocated with a high degree of scientific precision. The element of human judgment will always bulk large in the results, but there is nevertheless room for much refinement of method. In particular, accounting or statistical methods for the analysis of distribution costs must be developed and introduced by the different industries. Although during the course of this study considerable time has been devoted to the problem of distribution cost, only a limited amount of material on this subject has been included in the report. The questions raised were highly controversial, and, in the absence of any generally accepted practice, they could not be answered authoritatively. It was recognised, moreover, that, even if theoretically sound methods were developed, they could be of little use in taxation for some time because of the relatively small number of concerns which have the most modern and complete cost systems.

The purpose of this report, then, is to analyse, explain, and evaluate certain methods of allocation which are practicable under present conditions, to determine whether a system of separate accounting for the different establishments of an enterprise does or can be made to provide the most satisfactory basis for the allocation of taxable income, and to lay a foundation for further work. If the author has succeeded in attaining some of these objectives, it will be due in no small degree to the generous co-operation of others. Up to the time of his death, Dr. T. S. ADAMS was a constant inspiration and valued counsellor. Dr. Mitchell B. CARROLL, Director of the Study of the Allocation

of Income, has not only made available much useful material which would otherwise have been unobtainable, but he had also had an important part in shaping the report to meet immediate needs. Out of an exceptionally broad experience, Mr. H. B. FERNALD, Chairman of the American Institute of Accountants' Special Committee on Double Taxation, has furnished actual cases, described the methods and practices of different businesses, and made numerous valuable suggestions. Dr. Joseph J. KLEIN, Mr. Norman G. CHAMBERS, Mr. Donald ARTHUR, and Mr. Allan DAVIES, members of the Special Committee of the American Institute of Accountants, have likewise rendered valuable assistance. It would be impossible to mention all who have assisted directly or indirectly in this study. I am indebted to Professor Fred R. FAIRCHILD and to my other colleagues at Yale University for numerous suggestions, to Professor W. A. PATON, of the University of Michigan, and to a number of business men, lawyers, and accountants for their comments on the preliminary copy of this report. Although many persons have kindly offered their assistance in the preparation of this report, they are in no wise responsible for the opinion expressed herein. The author assumes full responsibility for opinions stated and for any errors which may be found.

New Haven, Connecticut.
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Ralph C. JONES.

ACCOUNTING METHODS FOR THE ALLOCATION OF TAXABLE INCOME OF INDUSTRIAL ENTERPRISES.

GENERAL SUMMARY.

Ad CHAPTER I. — ALLOCATION METHODS.

1. The general problem of reducing or eliminating the double taxation of income falls into two main divisions or categories which are closely related but nevertheless distinct. In one category are the problems arising from the conflict of laws of different tax jurisdictions which seek to tax the same item of income. Such problems are essentially legal in nature and must presumably be solved by means of suitable legislation or treaties. In the other category are the problems of allocation accounting — that is to say, the problems which arise in allocating or assigning business income or profit to different jurisdictions on the basis of general rules or principles prescribed by laws or treaties. This study is concerned only with problems of the latter type, except that certain general rules or principles must be assumed in order to provide a basis for accounting allocations. In accordance with the usual practice throughout the world, it has been assumed that business income or profit is to be taxed in the country of origin at the time of origin rather than at the domicile of the recipient at the time of distribution. Before a satisfactory solution to the problems of allocation accounting can even be expected, it is essential that the nations seeking to eliminate double taxation should decide in principle whether each country in which establishments of an international enterprise are located is to tax :

- (a) A share of the net profit of the whole enterprise or ;
- (b) The net profit originating within the country without regard to the profit or loss of the enterprise as a whole.

The one involves general apportionment ; the other, separate accounting. Although these two concepts are fundamentally different, they are often used indiscriminately. Unless one or the other is definitely adopted by international agreement, it is inevitable that enterprises which show a profit on their total business but which suffer losses in particular countries will be doubly taxed. The countries in which losses are sustained sometimes seek to levy a tax on a share of the net income of the whole enterprise, while the countries in which the profitable establishments are located naturally levy a tax on the profit originating therein without deduction of losses incurred elsewhere.

2. If the general rule that each country shall tax a portion of the total net income of international enterprises having establishments within its borders be adopted, the method of general apportionment is appropriate. The direct allocation of items of non-operating income such as interest, rents, profit on the sale of real estate, etc., is not inconsistent with the idea of general apportionment as here expressed. The method of general apportionment if intelligently applied may effect a reasonable division of taxable income among different tax jurisdictions, *but it will not ordinarily allocate profit to the place of origin.* This fact should be obvious, since no general

apportionment fraction can in any one year allocate losses to some branches and profits to other branches of the same enterprise. Therefore, in enterprises which have some profitable and some unprofitable branches, this method will always understate the profits of the former and overstate the profits of the latter. The discrepancy between the unquestioned profits of the more profitable branches and the income assigned to them by an apportionment fraction may be so great as to invite suspicion and litigation and, in the end, double taxation.

3. If the general rule that each country shall tax all the net income earned by establishments within its borders, regardless of the total profits or losses of the enterprises concerned, be adopted, however, the method of separate accounting is implied. The aim of separate accounting is to determine for each establishment or group of establishments of an enterprise within a given country the net profit which it would have earned if it had operated as an independent concern under similar conditions. Some branches and subsidiaries are so nearly autonomous and independent in their dealings both with outside concerns and with other units of the same enterprise that a clear determination of the separate profit of each establishment may be readily made. At the other extreme are branches and subsidiaries which are so intimately associated in the operations of a whole enterprise that the allocation of profit to branches must depend largely on the apportionment of operating income and expense accounts. Although separate accounting almost always involves the apportionment of certain items of income and expense, such apportionment differs both in degree and in kind from general apportionment. In separate accounting, items of income and expenses are directly allocated as far as possible to their respective sources, thereby reducing the zone of uncertainty which is inevitable in all apportionments. The remaining items of income and expense which cannot be directly allocated are then apportioned between the establishments concerned with a view to attributing to each the income it would earn if it were an independent enterprise, but not in accordance with the relative importance of different establishments. These apportionments, it should be noted, do not depend in any way on the amount of net profit or loss shown by the group of branches concerned or by the whole enterprise. Branch profit or loss determined by means of separate accounting even though the computation may have involved the apportionment of a number of items is likely to be more truly representative than any general apportionment which divides the total net income of an entire enterprise among its branches at a single operation.

4. It is recommended that separate accounting be approved in principle. This method is regarded as superior to the method of general apportionment for the following reasons among others :

(a) Due to tariff regulations and to differences in languages and currencies, international boundaries tend to become economic as well as political frontiers. Separate accounting, therefore, in many cases is the natural and accepted method by which business enterprises ascertain the profits of their foreign branches and subsidiaries.

(b) The acceptance of the separate accounts of the several establishments of an enterprise for tax purposes should assure that an item of income or expense will not be allocated to more than one jurisdiction, on grounds of source. No reasonable system of accounting would assign the same item of income to two establishments.

(c) The method of general apportionment, on the contrary, will not eliminate double taxation, because uniform methods in all countries are practically impossible. Even if a uniform fraction were adopted, methods of computing net income would vary so widely as to cause some double taxation. Moreover, it is quite inconceivable that legislative and administrative authorities will generally permit income earned within their jurisdictions to be reduced by losses sustained elsewhere.

(d) General apportionment always involves an enquiry into the worldwide business of an enterprise, whereas the separate accounts of a branch establishment may often be based on data which may be verified in the country of location of the branch.

(e) General apportionment, since it is a process of averaging data gathered in different countries under varied conditions and stated in different currencies, offers little opportunity for development or refinement. Separate accounting, on the other hand, has unlimited possibilities of further development.

Ad CHAPTER II. — BRANCH ACCOUNTING.

5. Each branch or group of branches within a single tax jurisdiction should be organised as a separate accounting unit with an adequate set of accounts and records. The question of adequacy must be answered in each particular case by considering the completeness and reliability of the information furnished by the branch books and supplementary schedules combined. For tax purposes, it is convenient, but not absolutely necessary, for each branch to have a complete set of accounts and records. A business enterprise should not be compelled to decentralise its accounting and to maintain complete staffs at all branches merely to meet income-tax requirements, provided the enterprise can and does render satisfactory returns based on its centralised accounts.

6. The accounting system of a branch should meet the special legal and tax requirements of the country in which it is located. In particular, it should provide for the segregation of items of income and expense which are directly allocable under fiscal laws and treaties from items of income and expense relating to joint operations in two or more countries.

7. The accounts of each branch should contain a complete analytical record of all inter-branch and inter-company transactions.

8. All transactions (a) between a branch and independent concerns and (b) between a branch and other branches or subsidiaries of the same enterprise should be supported by suitable vouchers or other documents.

9. *Foreign Exchange.* — Exchange losses and gains may be determined and allocated to the establishments of an enterprise in different countries by either of two general methods. These methods involve either :

(a) Determining these losses and gains by converting and consolidating branch and home office trial balances, and assigning the entire gain or loss to the home office ;

(b) Treating each branch practically as a wholly owned subsidiary and recognising exchange losses or gains only on actual remittances either on current or on capital account.

The former method is more commonly used, but the latter is suitable for autonomous branches operating on a capitalised basis.

Ad CHAPTER III — SEPARATE DETERMINATION OF SELLING AND MANUFACTURING PROFIT.

10. The objectives of separate accounting are :

(a) To assign to each branch the profit (or loss) which it would realise if it were operating as an independent concern under similar conditions ;

(b) To safeguard each branch so far as possible from taxation on profits which have not yet been realised and which may never be realised by the enterprise as a whole ;

(c) To accomplish these results by the use of data which can be verified in the country of location of the branch with the minimum use of figures for the enterprise as a whole.

No one method will accomplish all of these objectives in all cases. It is essential that the methods of separate accounting retain their present flexibility in order that they may be applied to all types and conditions of business. International business is so complex and branch relationships are so varied that every tool of accounting and statistics must be kept available without restriction for use in making allocations of profit. The adoption of any manual of uniform procedure which would standardise practice at the present level of development would be most unfortunate.

11. The three general methods of separate accounting which are available are based on :

(a) The payment of commissions or fees to outlying branches for services rendered, which will be referred to as the commission or fee basis ;

(b) The use of independently determined prices in the inter-branch billing of goods and services, which will be called the independent basis ;

(c) The analysis of internal data for the whole enterprise, which will be termed the cost basis.

Ad CHAPTER IV. — THE COMMISSION METHOD.

12. The commission or fee basis for remunerating branch establishments rests on the assumption that business enterprises ordinarily consist of a relatively large and important establishment, usually the real centre of management, and a number of outlying branches and subsidiaries. This central establishment or real centre of management is finally responsible for all profits earned by the enterprise and it may therefore be logically considered as a residual claimant for all profit in excess of the amount necessary to pay outlying branches for services rendered and to justify the investment of capital in them. The commission or fee should be such an amount as would induce an independent person to undertake the business with the expectation that a normal or reasonable volume of business will yield a return on the branch capital commensurate with the degree of risk inherent in the business.

The commission or fee basis is appropriate for buying, certain kinds of processing, and selling establishments. A reasonable commission or fee may be determined by considering the rates charged by independent concerns for similar services, by analysing branch operating accounts, or by both. When commission rates for sales branches are fixed by comparison with rates charged or gross profits earned by other concerns, an enterprise should be allowed to reduce the rate when it can show that the net proceeds remaining after deducting the commission are less than the normal or average cost of production or when branch profits based on the commission are unreasonably high. Manifestly, the commission or fee need not be large enough to provide a profit for the branch during a period when business is less than expected either because of business depression or because a new market is being developed.

The commission basis is the simplest of all methods. It automatically eliminates the problem of unrealised profit in branch inventories. It provides a more regular branch income less subject to extreme fluctuations than the income of branches which "buy" the product. In doing this, it assigns income to a branch proportionate to the volume of business done rather than in accordance with the fluctuation in prices of the commodities. When prices are falling, the income of the branch may not decrease proportionately so long as the volume of business continues ; also, when prices are rising, the income of the branch would not necessarily increase unless there were an increase in volume of business.

Ad CHAPTER V. — THE INDEPENDENT DEALER PRICE METHOD.

13. When branch accounts are kept on the so-called independent factory price basis, each branch is treated as a separate business and accounting unit, preferably with a formal capital assigned

to it by action of the board of directors. Dealings between autonomous branches of this type are kept on a commercial basis by the use of regular market or dealer prices in all inter-branch billing. Quoted market prices are available for a number of raw or semi-finished commodities, but not usually for manufactured goods which are patented or branded. The prices charged to sales branches handling such articles may be the same as prices charged to independent dealers. Factory prices fixed in this manner will be satisfactory if a substantial portion of the total business is transacted through dealers who are charged a uniform price and who operate on the same scale as the branches. If uniform prices are not used or if operating conditions of branches and dealers differ widely, dealer prices do not furnish a very reliable guide for the determination of inter-branch prices. Reasonable inter-branch prices, however, may often be fixed by a consideration of the margin of gross profit available to sales branches even though there is no fixed dealer price. The use of independently determined prices for inter-branch billing is an excellent method for eliminating bias in the accounts wherever independent criteria for judging the reasonableness of a price are obtainable.

14. The problem of unrealised profit in branch inventories appears whenever goods are billed from one branch to another at a price in excess of cost. If branches were treated exactly as independent concerns this unrealised profit would not be eliminated. The fiction of branch independence, however, cannot be fully maintained and an attempt to do so would lead to arbitrary and unreasonable results. It is therefore recommended that international enterprises be allowed to eliminate unrealised profits in branch inventories from the profit shown by the books of the branch from which the goods in question were shipped.

15. It is proper that each branch of a business enterprise should be charged at a reasonable rate for supplies furnished, services rendered, or expenses incurred in its behalf by the home office or any other branch. Such charges should be the result of specific services rendered and should be subject to reasonably accurate measurement. The apportionment of general overhead expenses to sales branches, however, cannot ordinarily be justified, since an allowance for such charges must be presumed to have been included in the independent factory prices charged for goods. General overhead expenses in a reasonable amount may be apportioned to purchasing, producing, or processing establishments if expenses of this character are not included in the prices or rates charged to such establishments by other establishments.

Ad CHAPTER VI. — THE CONSTRUCTED FACTORY PRICE METHOD.

16. Some enterprises have already introduced, and in the future others will no doubt introduce, accounting and statistical methods by which the profits of different branches may be ascertained with a considerable degree of accuracy. Since such methods require a careful and complete analysis of production and distribution costs and other factors, they can be effectively used only by enterprises which have well-developed cost systems. They cannot be required of all taxpayers, but tax authorities should encourage the development and introduction of better accounting methods by recognising and accepting accounts which do effect a reasonable allocation of income. In default of independently determined prices, the allocation of income may be accomplished by constructing an inter-branch billing price at cost plus a fixed and limited profit or by keeping accounts on a cost basis throughout and apportioning joint profits on different lots or lines of product. Some methods by which this may be done are mentioned in the body of this report, but they must be regarded as suggestions and not as exact standards to be officially adopted in detail. The methods of internal analysis may approach a scientific treatment of the problem of allocating income, but they require the use of data relating to operations in more than one country and therefore raise the problem of verification.

Ad CHAPTER VII. — APPORTIONMENT OF JOINT PROFIT ON MANUFACTURE AND SALE.

The method of apportioning joint profit on goods manufactured in one country and sold in another in the ratio of conversion cost to distribution cost should be useful both as a check on reported profit and as a means of making allocations. Naturally, it cannot be maintained that joint profit should always be divided in this ratio, but at least it provides a much more reasonable basis than the more common method of making apportionments according to total cost, including the cost of material.

Ad CHAPTER VIII. — ALLOCATION METHODS FOR VARIOUS ESTABLISHMENTS.

The problem of allocation has thus far been studied chiefly from the point of view of a single sales branch dealing with a single manufacturing establishment of the same enterprise. Other types of branches must now be considered.

17. *Manufacturing Establishments.* — A manufacturing establishment which transfers merchandise to number of sales branches may charge a uniform price to each or it may use different prices which are adjusted to meet special conditions found at the several branches. The use of a uniform price is convenient, but not always in accord with commercial practice as reflected in transactions between independent concerns. Although some variation in the prices charged to sales branches located in different countries and operating under different conditions seems inevitable, it is recommended that such variations (except in respect to damaged, obsolete or inferior goods) should be strictly limited. It is therefore recommended that, except in unusual conditions, the minimum inter-branch billing price be the normal cost of production defined as the cost of materials and labour plus a reasonable share of factory overhead, and that the maximum inter-branch billing price be the price which an independent concern would pay for the same goods under similar conditions — that is, the price which would leave a reasonable margin of gross profit for the sales branch. The income-tax is a poor weapon to use against dumping.

18. *Buying Establishments.* — Since profits are not ascribed to the purchasing function in ordinary commercial accounting, it is recommended in general that no attempt be made to do so in computing taxable income. Buying expenses according to this theory should follow the merchandise and be charged against the branches or divisions of an enterprise for which purchases are made. If a buying establishment performs additional functions, such as sorting, grading, storing or preliminary processing, it may be desirable to allocate profit to the establishment. This allocation may be made by placing the establishment :

- (a) On a commercial basis by causing it to charge the regular fees which an independent concern would charge for such services ;
- (b) On a trading basis by causing it to charge current market prices for goods purchased for or shipped to other branches of the enterprise.

Of the two methods, the former is preferable for general use. There are undoubtedly some circumstances under which the latter method would be appropriate, but placing a branch on a trading basis, unless it is practically autonomous and does trade on its own account, is likely to cause difficulty in connection with hedging operations, if any, or to cause a serious distortion of the profits of both the buying establishment and the other units of the enterprise with which it deals.

19. *Processing Establishments and Assembly Plants.* — These two types of plants are distinguished from manufacturing establishments by the fact that they perform only a relatively

small part in the processes of production. Profit can ordinarily be allocated to intermediate processing establishments by assigning to them as a fee for services rendered an amount sufficient to provide a reasonable return on the investment under normal operating conditions. The problem of allocating profit to assembly plants requires further study in relation to the particular industries involved. The methods suggested in this report for manufacturing establishments will apply to both processing establishments and assembly plants, but special difficulties arise where the final product is the result of a long series of processes in different plants.

Ad CHAPTER IX. — CAPITALIZED BASIS OF BRANCH ACCOUNTING.

20. If a general rule that interest is to be taxed in the country of origin be adopted, it is recommended that no deduction for intra-company interest charged to branches be allowed. Since both interest and profit would be taxable in the same country, there would seem to be little need for distinguishing between them. If interest, however, is to be taxed at the domicile of the recipient, a clear demarcation between business profit and interest must be effected. This may be done by allowing a charge for interest on advances to branches which are operated on a capitalised basis, or by making an apportionment of interest on general indebtedness, but not by both.

Ad CHAPTER X. — BRANCH TAX RETURNS AND SUPPORTING SCHEDULES.

21. Branch establishments keeping separate accounts should report their income on regular tax returns supported, if requested, by supplementary schedules summarising and explaining all intra-company transactions.

22. Taxpayers should have the privilege of submitting certified statements of professional accountants supporting the figures shown in the accounts of foreign establishments not subject to review by the local tax authorities. Such statements, if prepared by a reputable firm of accountants, should be given considerable weight in making findings of fact.

CHAPTER I

ALLOCATION METHODS.

1. The preparation and presentation of a complete statement of financial condition, the balance-sheet, and a statement of operating results, usually called the profit-and-loss statement, are generally recognised as primary aims of accounting. Although these statements apply to the total business of an enterprise, the information which they provide may be adequate for small concerns engaged in a single line of activity. Large industrial organisations require more detailed information. The manufacture of complicated products in a multiplicity of forms and sizes created the need for the determination and analysis of the unit costs of production, and the whole science of cost accounting was developed. The development of worldwide organisations for the distribution of the products of single companies has now created a similar need for the detailed analysis of distribution costs and for the determination of operating results both by types of product and by territorial divisions. An accounting or statistical technique to meet this need will inevitably be developed, but it will not be the work of one man or of a single year. When accounting theory and practice have reached this point in their development, or when suitable statistical methods have been introduced, it will be possible to allocate business profits with some degree of assurance. Taxes, however, must be paid in the meanwhile, and it will therefore be necessary to work out equitable, if not exact, methods of allocation based on accounting procedures now in actual use.

SEPARATE ACCOUNTING AND FRACTIONAL APPORTIONMENT.

2. In the replies to questionnaires issued at the beginning of the study of allocation methods, the preference for separate accounting for branches of foreign enterprises, not only among taxpayers, but also among tax authorities and accountants, was so marked as to create a strong presumption in its favour. The advantages of separate accounting from the point of view of the taxpayer are clear enough. The flexibility of the method makes it possible to introduce a system of accounting which meets the peculiar requirements of each branch, no matter what its size or function, and the acceptance of these branch accounts for tax purposes effectively prevents the double taxation of income, since under no system of accounting would the same item of income be allocated to two or more branches. The acceptance of branch accounts, moreover, relieves the taxpayer of the necessity of including figures for the entire enterprise on the return of each branch. To the taxpayer about the only disadvantage of separate accounting is the possibility that the keeping of separate accounts for each branch in a manner which will meet tax requirements may involve additional book-keeping expense.

3. American corporations will have a double reason for keeping accounts which show the profits earned in each foreign country separately. Section 131 (e)¹ of the United States Revenue Act of 1932 now provides that, in order to obtain the credit for foreign taxes, a corporation must report, not only the total amount of profit arising from sources without the United States, but also the

¹ Section 131 (e) : *Proof of Credits*. — The credits provided in this section shall be allowed only if the taxpayer establishes to the satisfaction of the Commissioner (1) the total amount of income derived from sources without the United States, determined as provided in Section 119, (2) the amount of income derived from each country, the tax paid or accrued which is claimed as a credit under this section, such amount to be determined under rules and regulations prescribed by the Commissioner with the approval of the Secretary, and (3) all other information necessary for the verification and computation of such credits.

amount originating in each foreign country. Since branch profits must be separately determined both in computing the tax due to foreign countries and in ascertaining the credit for foreign taxes, it will be advantageous to American corporations in particular to use branch accounting methods which all countries can accept. The failure to do so may mean double taxation, or the loss of the credit for foreign taxes, or both.

4. From the point of view of the tax authorities of countries in which branches of foreign enterprises are located, returns based on a separate accounting are convenient because they relate solely to operations within the country and can be handled and verified in much the same way as the returns of independent concerns. By contrast, returns which relate to the entire business of an international enterprise are inevitably complex and not subject to the usual methods of verification. Separate accounting would be the ideal method were it not for the fact that the amount of profit reported by a branch may depend so largely on the pricing of intra-company transactions as to make the results subject to question. But even where the amount of branch profit is significantly influenced by inter-branch charges for goods and services, some countries, notably the United States and the United Kingdom, seek to adjust these charges to a reasonable basis rather than to use any method of fractional apportionment. Experience has shown that such adjustments can usually be made on some reasonable basis. It is probable, moreover, that, if separate accounting is generally accepted, business concerns will devote more attention to the introduction of accounting methods which will reasonably reflect branch profits without the necessity of important adjustments.

5. The preference for separate accounting in principle, though marked, is not unanimous. The Spanish administration in particular advocates the method of fractional apportionment and a strong case in its favour is presented by Dr. Agustín Viñuales in his report on the Tax System and Allocation Methods in Spain.¹ The validity of most of the arguments² for the Spanish system is at once apparent if the principle of taxing branches according to the capacity of the entire enterprise to pay be accepted. Under the Spanish system, capacity to pay is measured by the total profit of an enterprise, and a share of this total profit is attributed to the branches in Spain in accordance with their estimated relative economic importance to the enterprise as a whole. A corporation, for example, which earned no profit on its total business would presumably pay no income-tax in Spain (except minimum payments on capital), even though the Spanish branches unquestionably earned substantial profits. Taxation by such methods may seem logical, but the principle of taxing foreign enterprises according to ability to pay, as interpreted by the Spanish authorities, is not generally accepted.

6. In most countries, the intention is to tax all business income in the country of origin without regard to profits or losses elsewhere. This result cannot ordinarily be obtained by the method of fractional apportionment. An apportionment fraction may quite properly be used by agreement to make a reasonable division of profit among several tax jurisdictions, but it will not, except by accident, allocate profit to the place of origin. The two things are quite different. It is entirely reasonable and proper for two countries to agree that the profits of enterprises operating in both shall be divided for tax purposes in, say, the ratio of tangible property in the one to tangible property in the other. It is not reasonable to assume, however, that the amount of profit really originating in either country can be determined by this ratio, or by a ratio based on any other common factor or combination of factors. All general apportionment fractions as a matter of mathematical necessity allocate profits or losses evenly to all branches. By their very nature, they cannot allocate profits to some and losses to others. They cannot, therefore, be said to allocate profits and losses to the branches at which they originate, for at different times in almost any large enterprise some branches are profitable and some unprofitable. This fact alone should be sufficient to indicate that

¹ In "Taxation of Foreign and National Enterprises", O.N. document C.73.M.32, 1932, IIA, pages 127 to 164.

² *Ibid.*, pages 143 to 146.

the method of fractional apportionment cannot meet the needs of countries which insist on taxing all income originating within the country without regard to the total profit or loss of an enterprise as a whole.

7. The confusion which commonly exists in regard to the function of a general apportionment fraction is unfortunate, and may cause a considerable amount of double taxation. If the branches of a given foreign enterprise in some one country are undeniably profitable, the tax authorities are likely to insist on levying a tax on the profits even though the company as a whole may operate at a loss. The same authorities may at the same time use an apportionment fraction to levy an income-tax on the unprofitable branches of another enterprise which happened to show a profit on its total business. This is inconsistent. Either the branch accounts, if properly kept, should be accepted whether they show a profit or a loss, or the method of apportionment should be consistently used. It should be clearly understood that a country is to tax either the profits originating within its borders or a reasonable share of total profits. It is not proper that each country should exercise the option of choosing the more profitable alternative.

8. In addition to the theoretical objection that apportionment fractions do not allocate income to the place of origin, there are practical difficulties in the use of this method comparable to those which arise in separate accounting. The original data from which an apportionment fraction must be constructed are stated in different currencies which must be converted at varying rates. What, for example, is the present investment of an American concern in a building constructed for its London branch when sterling exchange was at 4.85 dollars? The fall in the value of the pound in terms of dollars did not proportionally increase English construction costs or the value of London real estate. It did, however, effectively reduce the real value of the American company's investment. This is only one of a number of questions which might arise if the tax authorities of, let us say, France were attempting to determine the investment of the American company in fixed property outside of France for use in an apportionment fraction. The fact that such questions do not receive detailed consideration simply indicates the extent to which apportionment fractions are based on rough approximations. The use of pay-rolls as a factor raises not only exchange difficulties, but also the problem of differences in wage levels. Ought twice as much profit to be allocated to the United States, for example, simply because American wage rates expressed in dollars happen to be twice as high as the money wages in some other country? Numerous other difficulties arise in connection with the apportionment method, but they are too familiar to tax officials to require re-statement here.

9. From the point of view of the taxpayer, the objections to fractional apportionment are two. The first is the improbability that uniform fractions will ever be used in all or even in a majority of countries. The second is that, even if uniform fractions should be used, each country would have to enquire into the worldwide business operations of international enterprises. For over twenty years, income-taxes have been levied by certain American States, and, in that time, little progress has been made toward the introduction of uniform fractions. If uniformity cannot be obtained among the different States within a single country in which language, currency and accounting methods are essentially the same, the prospects for uniformity among nations are not bright. And the fact that taxable income is not computed by the same methods in the different countries would produce inconsistent results even if uniform fractions were used. In other words, the use of a uniform fraction in all countries, even if it were possible, would not prevent the taxation of more or less than 100 per cent of the income of a business enterprise.

10. For international enterprises, however, the necessity of reporting in every country on total world business is perhaps almost as onerous as the double taxation which may result from a lack of uniformity in apportionment fractions or in methods for computing net income. The labour of preparing such returns and obtaining the information necessary to comply with the varied

requirements of so many countries is, to say the least, considerable. And some of the information with respect to distant branches, although actually irrelevant in computing income in a given country, may cause unnecessary disputes, or other complications. Corporations, it is true, can usually avoid the necessity of reporting on their entire business by organising subsidiary companies, and many corporations do use this method, but it is difficult to see wherein a country benefits from forcing business to be conducted through subsidiaries rather than branches.

11. In addition to the two principal methods of allocation which have already been discussed, there is a third group consisting of the so-called empirical methods. It is characteristic of these methods to make use of information gathered from outside sources, usually from the returns of independent concerns engaged in the same or a similar line of business. Ordinarily, an average or typical rate of gross profit or of net profit to sales in the particular line of business is determined, and this rate is then applied to the sales, sometimes called the turnover or the gross receipts, of the branch in question. Other empirical methods may represent nothing but a more or less intelligent guess as to what a branch ought to earn as indicated by certain factors, such as its investment in fixed property, the size of its inventories, and the number of its employees. These empirical methods are useful as general tests of reasonableness, but they have no valid theoretical basis, and obviously they can never eliminate double taxation.

12. After several months of almost continuous study, during which the manifold difficulties of separate accounting have become increasingly clear, it is still the opinion of the writer that this method offers the best means of obtaining satisfactory allocations of profit to branches of foreign enterprises. No other method seems to have the same opportunity to relieve business concerns from taxation on more than 100 per cent of their income and at the same time to insure the reporting of a reasonable income in all countries. It is flexible enough to meet the needs of all types of business, but this very flexibility makes it impossible to prescribe anything like a uniform system. Appropriate accounting systems must be developed by the industries themselves. The adoption of separate accounting as the preferred method by international agreement would provide a strong stimulus toward the development and introduction of accounting methods which would meet tax requirements.

NATURE OF SEPARATE ACCOUNTING.

13. The term separate accounting does not refer to a single well-defined method, but rather to a whole group of methods with a common aim. Indeed, separate accounting is only a point of view or an avenue of approach to the general problem of allocating business profits on a geographical basis. The accounting methods by which the allocation of profit may be accomplished must be as diverse as the conditions within the different industries are varied. Separate accounting rests on the assumption that the different branches of an enterprise are separate business units which may be treated for accounting purposes practically as independent concerns. Some enterprises are so organised that branch profits may be determined on this basis with as high a degree of accuracy as the profits of independent concerns. Other enterprises operate as organic units in which the different branches are so closely related that a true determination of the separate profits of each branch is impossible, not merely because of the large number of factors to be considered, but chiefly because the very concept of a real separate profit for each branch is contrary to the actual facts. Profits must be allocated, however, even though a business enterprise is admitted to be an indivisible organic unit. Compromises between practical necessity on the one hand and pure theory on the other are not unknown in accounting. If accounting were compelled to wait upon pure theory to provide a basis for the practical quantitative answers which business activities demand, there would be no accounting. There is, for instance, no universally accepted definition of income or profit and yet accountants must ascertain period by period the amount of profit earned by each enterprise. The absence of an exact theoretical basis means simply that a criterion of reasonableness must be substituted for scientific precision in allocating profits to branches.

14. A close parallel can be drawn between separate accounting and cost accounting. Cost accounting rests essentially on the assumption that a unit cost for each product can be found and that these unit costs multiplied by the number of articles manufactured in each class must equal the total cost of operating the factory. Now unit costs constructed in this manner are hybrids consisting of the actual cost of materials and direct labour plus an average amount of overhead. They represent, therefore, neither a true differential cost (the additional cost of manufacturing one more unit) nor a true average cost, but they have been extremely useful. Recent developments in cost accounting have tended to create a clearer understanding of the significance of unit costs, and there is a growing appreciation of the fact that there is no single unit cost for any article, but rather a whole series of unit costs depending upon the purpose to be served. A similar situation exists with respect to separate accounting. Branch profits may be computed differently for different purposes and no one figure for profit would suffice for all of them. It is necessary, therefore, to select that concept of profit which is most suitable for tax purposes and then to seek reasonable methods for making the necessary computations.

15. Income-tax laws in all countries have been framed generally for the purpose of taxing whole enterprises, not parts of enterprises. When a single enterprise, however, operates in two or more countries, the parts must be taxed separately, and simple justice requires that they be taxed on the same basis as whole enterprises. In order to accomplish this result, it will be necessary to frame special laws and administrative regulations for the taxation of branches or to require simply that branch returns be made on the same basis as the returns of independent concerns. The latter procedure would place the burden of computing branch income squarely upon the accountants and the taxpayers themselves, thereby forcing them to develop and introduce systems of accounting adequate for tax purposes. The dangers of making special laws and detailed regulations are two. It is quite inconceivable that the laws and regulations of different countries should be the same, and they would necessarily be inflexible and not easily modified to meet changing conditions, even if uniformity were secured by treaty. The advantages of separate accounting are that it is flexible and readily subject to modification as methods of accounting improve or as conditions change. Moreover, even if different concerns use different accounting methods, each concern can and ordinarily should use the same method of branch accounting in the different countries in which it does business.

16. If branches are to be taxed under the laws and regulations prescribed for whole enterprises, it is clear that the aim of all methods of allocation must be to ascertain the profit which an independent concern would have earned under identical conditions. This ideal can never be attained in practice — indeed, some compromises such as the elimination of unrealised profits in inventories seem to be desirable — but there are several methods by which it may be approximated. In order to treat branches as independent business entities, two things are necessary :

- (1) An appropriate capital should be formally assigned to each branch ;
- (2) All inter-branch transactions should be made on the terms and at the prices which would apply to similar transactions between independent concerns.

17. The latter of these requirements is by far the more important. The question of pricing relates to every inter-branch transaction. Indeed, if inter-branch prices are proper, and appropriate allowances are made for risks of loss and interest on borrowed capital, a satisfactory allocation of profits can be made without placing branches formally on a capitalised basis. The establishment of a definite capital account for each branch by resolution of the board of directors would help to carry out the treatment of branches as independent concerns, but it is not absolutely necessary. ¹

¹ *Infra*, Chapter IX, paragraphs 134 to 137

CHAPTER II.**BRANCH ACCOUNTING.**

18. This study deals primarily with the allocation of profit to branches — that is to say, to establishments of any kind, whether belonging to an individual, a partnership or a corporation. Since a properly organised subsidiary corporation constitutes a separate legal entity, even though it is controlled through stock ownership or otherwise, it should be treated as such, and it should keep separate accounts relating to its own activities. If the parent enterprise, however, treats the subsidiary company as a branch and includes it as such in its own accounting — and tax officials testify that this is sometimes done — then, in many countries, the officials will regard the parent enterprise as the taxpayer and the subsidiary as a mere branch. In determining the income allocable to the subsidiary in such case, the procedure followed may be essentially the same as that described herein with regard to branches. It is recognised that special tax problems arise out of the parent-subsidiary relationship, and that an accounting study of these problems would be desirable, but since a complete treatment would be impossible, it will not be attempted. For tax purposes, however, a subsidiary must ordinarily be regarded either as an independent concern or as a branch. There can hardly be an intermediate concept.

GENERAL ACCOUNTING REQUIREMENTS.

19. The purpose of separate accounting is to maintain accounts for the branch or branches of an enterprise in each tax jurisdiction which will reflect the income directly allocable thereto and provide the essential data for the apportionment of items of income or expense which cannot be directly allocated. The limited apportionment of various items of income or expense or of the joint profit on specific goods which is a necessary part of separate accounting must, however, be distinguished sharply from general apportionment which involves the division of the net income of a whole enterprise. There is no one system of branch accounting by which proper allocations of profit may be accomplished in all cases. Methods of accounting for branches of foreign enterprises naturally differ, depending upon the functions exercised by a branch, its size, the general plan of organisation, and other factors. Routine methods of accounting for branch establishments are, however, so well understood that they need not be presented here. Further information on this aspect of branch accounting may be readily obtained from textbooks on the subject or from accounting and trade periodicals. Although the routine procedures may vary among enterprises, there are a few general requirements which should be met if branch accounts are to be used effectively in the determination of taxable income. The variety of tax laws and regulations in different countries is so great, however, that no statement even of general requirements will be applicable in all jurisdictions.

I. *Each branch or group of branches within a single tax jurisdiction should be organised as a separate accounting unit with an adequate set of accounts and records.*

20. In order to treat a branch as a separate accounting unit, it must be thought of as a distinct business entity which can and does have transactions with other branches of the organisation as

well as with independent concerns. The concept of a branch as a separate accounting unit may be maintained even though inter-branch transactions are not priced on the same basis as transactions with independent concerns, and even though all accounts are not kept on the branch books. The branch, however, must be credited for goods shipped or services rendered to any other branch, and it must be charged for all goods or services received.

21. Although the concept of the branch as a separate accounting unit can be maintained even though all branch records are kept at the home office, such an arrangement makes the problem of verification more difficult for tax authorities in the country of location of a branch. The policy of centralising all branch accounts in one office is often followed, especially for domestic branches, in order to save book-keeping expense and to provide a more complete control over branch operations. The centralisation of the accounts of branches of foreign enterprises in this manner, however, is less common because of the distance from the home office, the differences in currencies and customs, and other factors which make it necessary for such branches to operate with a considerable degree of independence. In the foreign field, completely centralised accounting can be most conveniently used for consolidating the accounting work of branches located in the same country.

22. In order to meet tax requirements, it is apparent that a branch must keep some records even though a complete set of accounts is kept at the home office. These records would ordinarily show branch sales and expenses locally paid, though they might not show the cost of goods handled by the branch or expenses incurred by the home office for the benefit of the branch. If supplementary schedules submitted annually by the home office are adequate for the determination of branch profit, there should be no disposition to require the branch to keep a complete set of accounts. Such a requirement might force a company to maintain a costly accounting staff where native book-keepers would suffice, or to disclose information which the management does not wish to give to branch employees. This situation exists in particular at the smaller branches located in oriental countries. Larger branches are likely to have some formal accounts, though not necessarily a complete schedule of accounts from which a balance-sheet and profit-and-loss statement can be prepared.

23. A branch which does have an accounting staff may keep only the current operating accounts. Fixed asset accounts are quite commonly kept at the home office in order to avoid the necessity for making foreign exchange conversions. Where this is done, the branch may keep a memorandum record of fixed assets and their related depreciation accounts and compute its depreciation charges therefrom, or depreciation may be charged on the receipt of advices from the home office. Sometimes such charges are omitted entirely from the branch books.

24. If a branch maintains a staff to keep its current operating accounts, however, the amount of additional book-keeping expense required for keeping a complete set of records should not be large. For tax purposes, this undoubtedly has some definite advantages. Accounts locally kept can be audited and verified more easily and doubtful items more readily explained. It may be stated, therefore, as desirable though not absolutely necessary that each branch (or group of branches) seeking to be taxed on its own accounts should keep such records as will permit the preparation of complete financial statements from the branch books. The real test of adequacy, however, is not what records are kept, but rather how full a disclosure is made by the branch records and home office schedules combined.

25. Branch account classifications should be as nearly uniform as possible and in agreement with the classification used by the home office. Such uniformity facilitates the preparation of consolidated statements for the enterprise as a whole, and increases the probable accuracy of expense apportionments.

II. *The accounting system of a branch should meet the special legal and tax requirements of the country in which it is located.*

26. In some countries, the commercial code, or the tax law, contains certain requirements regarding the keeping of accounts, and these, of course, must be followed by branches as well as by independent concerns. Other countries make only a general requirement that accounts shall be kept in such a way as to reflect the true income. Such requirements are so general in their application that they fix no definite standard of accounting practice.

27. More pertinent to the problem of allocation is the segregation of branch income and expense into two classes :

(1) The income definitely allocable for tax purposes to sources wholly within or wholly without the country under fiscal laws and treaties ;

(2) The balance of the income which is derived from the joint activities of establishments within and without the country and which has to be divided or apportioned between the interested jurisdictions.

28. The net income definitely allocable to a given country is the excess of definitely allocable gross income over the amount of related expense. Income of this character is made up of such items as income from real estate, interest, dividends, salaries and royalties on patents and copyrights. In the tax laws of many countries, such items of income are subject to special rules of assessment or to specific schedular taxes. The twenty odd treaties which have been concluded between the various European Governments for the prevention of double taxation follow this general classification rather closely, and, since these items can be ascribed to a definite source, they can usually be allocated without difficulty.

29. The principal problem of allocation arises in connection with income from trade, commerce or industry, particularly with respect to goods manufactured, processed or produced in one country and sold in another. It is not enough that income of this character should be separated from definitely allocable income. The income and expense attributable to joint activities must be carefully analysed in order to permit of a satisfactory allocation. Usually this requires some departmentalisation of accounts, though, in certain industries, departmentalisation is impossible and statistical methods must be substituted in analysing operating results. Railroads, for example, cannot set up separate accounts for the expenses relating to freight and passenger traffic. In manufacturing and mercantile enterprises, however, departmentalisation by major lines of product is usually feasible. It is necessary if profits are to be allocated equitably to branches handling different products. If a sales branch, for instance, handles three distinct lines of product, one of which is obtained from independent sources, one from a purchasing branch of the enterprise in another country, and one from a foreign manufacturing establishment of the enterprise, it is probable that no satisfactory basis for allocation can be found unless separate accounts are kept for each of the three lines. Any method of allocating or apportioning the profits of the three lines combined would necessarily be arbitrary. Even where all of the products come from a single foreign manufacturing plant of the enterprise, the need for departmentalisation usually exists, since the margin of profit, volume of business, method of selling, and other factors may be different for each line.

30. The principles of departmentalisation are simple enough in the abstract, but many complexities arise when they are applied under actual business conditions. In general, departmental divisions should correspond to lines of product handled and to divisions of authority within an enterprise. Each concern, however, must arrange its departments according to the requirements

of its own organisation. No one plan will fit all companies even in the same industry. After the accounts have been departmentalised, and after allocations of income and expense have been made, the results may properly be combined on a single tax return covering all the operations of a branch. In many cases, however, the accuracy of the allocations will depend in no small degree upon the care with which departmental lines have been maintained in the underlying accounts.

III. *The accounts of each branch should contain a complete analysis of inter-branch and inter-company transactions.*

31. Since it is these intra-company and inter-company transactions which cause most of the difficulty in the attempt to use branch accounts for tax purposes, it is particularly important that a complete summary of all such transactions should be obtainable. If one branch deals with other branches of the same company, these inter-branch transactions are usually passed through the home office current account. It is easier, as a rule, for the home office to reconcile one current account with each branch than to reconcile and adjust a number of inter-branch accounts. If this system is followed, each current account will contain a complete record of all transactions of that branch with other branches of the company, with the possible exception of transactions settled in cash.

32. Although there are advantages in handling all inter-branch transactions by the method indicated, it may sometimes be more convenient to open separate accounts for transactions between two branches which deal regularly with each other. If one branch regularly supplies the other with merchandise there can be no objection to direct charging between the two, provided the intra-company character of such transactions be not concealed. If the shipping branch simply debits an account receivable and credits sales for the goods transferred and the receiving branch merely debits purchases and credits an account payable, there is some danger of overlooking the fact that an intra-company transaction has taken place and that the prices charged for the goods are not determined by agreements with independent concerns. All inter-branch transactions, even those currently settled in cash, should be cleared through the home office current account or a special branch current account in order to indicate the intra-company character of the transactions.

33. Ordinarily, the home office current account shows the entire equity of the home office in the branch assets. When branches are placed on a capitalised¹ basis, however, this current account may be split into two or more parts, one of which will be the permanent capital of the branch, and another the real current account in which the routine inter-branch transactions are recorded. The methods of effecting this division are discussed in the chapter on interest.²

IV. *All transactions (a) between a branch and independent concerns and (b) between a branch and other branches or subsidiaries of the same enterprise should be supported and explained by vouchers or other documents.*

34. The keeping of vouchers supporting transactions with independent concerns is as important for internal audit as it is for verification by tax authorities. This is the accepted practice of business concerns. The failure of a branch to produce vouchers for certain transactions should be viewed in the same light as a similar failure on the part of an independent concern.

35. Obtaining satisfactory vouchers for intra-company transactions is more difficult. Intra-company charges may be either direct or apportioned. Direct charges include such items as

¹ *Infra*, paragraphs 134 to 150.

² *Infra*, paragraphs 135 to 137.

materials, merchandise or supplies transferred, or specific services rendered. Apportioned charges consist of expenses which are incurred for the benefit of two or more branches or divisions of a business and must, therefore, be apportioned among them. Direct charges should be billed in the same way as similar charges would be billed to an outside concern. The pricing of such inter-branch transfers of goods and services will be one of the principal objects of this study, but routine accounting requirements will be met if the price basis is clearly indicated.

36. Since it is very difficult to secure satisfactory evidence in support of apportioned charges, it is desirable, both for the sake of accuracy and for ease of verification, that direct charging should be used wherever possible. Some expenses which must be apportioned will, however, always remain. Since branch books offer no possible means for the independent verification of such charges, it is essential that they be fully explained and that the method of apportionment be clearly indicated. Tax authorities could obtain greater assurance as to the accuracy and the propriety of inter-branch transactions and the reasonableness of apportionments by requiring or accepting the certified statements of recognised firms of public accountants in doubtful cases.

37. The four requirements already given have been stated from the point of view of outlying branches, but most of them will apply to the home office or real centre of management which may be looked upon simply as a central branch. The home office, of course, must keep a complete set of accounts, including the branch current accounts. It should likewise keep a complete file of vouchers, letters, or other documents to support all transactions with branches and with independent concerns. There will also be the same need for explaining the basis and nature of all intra-company and inter-company transactions by which profits might conceivably be diverted to foreign branches or subsidiaries.

38. Trial balances of all branches will be periodically prepared and converted into the currency of the home country in order that consolidated statements may be prepared for the entire enterprise. In computing the amount of income taxable at the home office, these figures for foreign branches are of vital importance. On the return for the home office, the tax authorities may require consolidated figures for the entire enterprise and permit the deduction of income allocated to foreign branches, or they may require figures for domestic business only on the return proper. In any event, an analysis of the results of branch operations will be necessary in order to prevent the diversion of profits. Tax auditors in the country in which the home office is located will naturally find more complete information than is available at branches, but they will, nevertheless, have some difficulty in verifying foreign items. Certified statements prepared by accountants who have audited branch books should be of assistance here. Such statements are commonly obtained in preparing annual reports for the stockholders and there would seem to be no reason why they should not be used also for tax purposes.

FOREIGN EXCHANGE.

39. The fact that the accounts of branches of international enterprises must be kept in different currencies raises a number of exchange difficulties. Accounting procedures have been worked out to care for ordinary differences which appear when the exchanges are relatively stable, but there seems to be no generally used procedure by which the problems arising out of the violent exchange fluctuations of the post-war period can be adequately handled.

40. When goods are transferred between two independent concerns in different countries, the terms of sale require payment in one currency or the other, or on occasion in the currency of a third country. If payment is to be made in the currency of the exporting country, the importer assumes the risk of exchange fluctuations between the actual date of the invoice and the date of payment. If the contract, however, specifies payment in the currency of the importing country, the risk of

exchange fluctuations falls on the exporter. When the currency of a third country is specified, both importer and exporter incur risks on exchange. Either party may eliminate his risk by the purchase or sale of the required amount of exchange, but, in all transactions between independents, the responsibility for exchange differences is definitely placed. If an importer or exporter does not hedge his commitments, an account for profit or loss on exchange will appear on the books and the amounts recorded therein will represent real speculative gains or losses.

41. If subsidiary companies are treated as wholly autonomous units, gains and losses on exchange will be determined just as they are between independent concerns. A further adjustment for exchange differences will, of course, be necessary if consolidated statements are prepared, or if the investment in subsidiaries is adjusted to compensate for exchange variations. In branch accounting, however, transactions involving foreign exchange are not as a rule handled in the same way as transactions between independents. The practice seems to be for the exporting branch, usually the home office, to record each transaction in its own currency and to keep a memorandum of the amount, expressed in the currency of the importing branch. The importing branch, in the same manner, records the transaction in terms of its own currency, and may keep a memorandum record of the amount in terms of the other currency. Since this procedure applies both to shipments of goods and to remittances, there is no fixing of responsibility for exchange fluctuations. At the end of each accounting period, the trial balances of all foreign branches are converted into the currency of the country in which the home office is located. Since different rates are used in converting the several items of a branch trial balance, a difference which is supposed to represent the gain or loss on exchange will appear. If the debits exceed the credits after conversion, the difference is called a profit on exchange ; if credits exceed debits, however, the difference is recorded as a loss. The gain or loss so determined may be entered in the general profit and loss account of the company ; it may be added to or subtracted from the reported profit or loss of the branch ; or it may be transferred to a reserve for exchange fluctuations and not treated as a profit or loss at all. Methods of accounting for exchange operations are discussed in detail in Appendix A.

CHAPTER III

SEPARATE DETERMINATION OF SELLING PROFIT AND MANUFACTURING PROFIT.

42. In accounting and tax literature, there are occasional references to a so-called sales or selling profit which is distinguished from a manufacturing profit. Although these vague concepts are never defined, they rest apparently on the obvious fact that the profits of a manufacturing enterprise arise from the manufacture *and* the sale of goods. It is tacitly assumed that this profit can be divided between, or ascribed to, one or the other of the processes from which it is derived, but it is almost as futile to attempt to allocate profits to the different functions of a business concern on grounds of pure theory as it is to try to discover how much of the cutting is done by each blade of a pair of shears.¹ Both blades are essential, but no more so than the two functions of manufacturing and selling in an industrial enterprise. Profits do not arise from manufacturing alone. Despite these theoretical difficulties, profits can be divided in most instances by resorting to methods used in dealings between independent enterprises.

43. The typical manufacturing concern performs two primary functions, production and distribution. It would perhaps be more accurate to say that a manufacturing business consists of a trading business and a service business combined. A grist mill to which farmers take their grain to be ground into flour for their own use is clearly a service business, similar in many respects to a public utility. A concern engaged solely in buying and selling wheat is clearly a trading business. The profits of the mill and of the trading concern may be easily determined, and no particular problem of allocation arises. Difficulties begin, however, when the grist mill and the trading concern are merged into a flour mill which buys wheat and sells flour. There is no exact method by which the profits earned by grinding wheat into flour can be specifically separated from the profits earned in the process of marketing.

44. Continuing the illustration, the cycle of operations consists of the purchase of wheat, the grinding into flour, and the sale of the flour. Translated into terms of cost, these operations respectively include the cost of materials, conversion cost and distribution cost. Contrary to the usual ideas on the subject, the purchase of basic materials is really a trading function rather than a manufacturing function. If the cost of such materials is deducted from the selling price of the finished product, the remaining figure is the amount of gross revenue available to meet the cost of two distinct services, production and distribution, and to provide profits for the concern as a whole.

45. When the functions of manufacturing and selling take place at establishments in different countries, the proper determination of the taxable income of each establishment requires a system of branch accounting with the following primary objectives :

- (1) To assign to each branch the taxable profit which it would earn if it were operating as an independent concern under similar conditions ;

¹ After Alfred MARSHALL, " Principles of Economics ". Eighth Edition, London 1920, page 348.

(2) To safeguard each branch, in so far as possible, from taxation on profits which have not yet been realised and which may never be realised by the enterprise ;

(3) To accomplish these results by the use of data which can be verified in the country of location of the branch with the minimum use of figures for the enterprise as a whole.

46. The second of these objectives, it should be noted, is a modification or qualification of the first. In dealings between independent concerns it is, of course, quite common for one of them to earn a profit and for the other to suffer a loss with respect to the same lot of merchandise. It is possible that the different branches of a single concern should be treated in this respect exactly as independent businesses, but it seems a bit severe, and perhaps impractical, to attempt to tax a profit which is more than offset by a loss sustained by some other branch on the same goods. Attempts to tax unreal profits of this character are likely to cause taxpayers in self-defence to seek methods of evasion or avoidance.

47. In the chapters which follow four general methods will be discussed in the light of these criteria :

(1) The allowance of a fixed commission to sales branches, all remaining profit to be assigned to the manufacturing division ;

(2) The transfer of goods to sales branches at an independent dealer price or, its equivalent, an independent factory price ;

(3) The transfer of goods to sales branches at a constructed factory price :

(4) The apportionment of the net profit realised by each sales branch on goods billed to it at cost.

CHAPTER IV

THE COMMISSION METHOD. ¹

48. The commission method is based on the assumption that goods are consigned to the sales branch in the same manner as they would be to an independent commission agent. The essential feature of a consignment as distinguished from trading is the retention of title by the consignor. Goods are placed in the custody of a consignee who has the power to sell them and to transfer title to the purchaser, but until the time of sale ownership is vested in the consignor. The consignee's remuneration for handling the goods may take the form of a commission on sales, or possibly a profit measured by the excess of the selling price over a price agreed upon by the consignor and the consignee. Since the consignee commonly receives a commission, this method of transacting business is often referred to as the commission basis. The commission method, however, may be used where an agent makes sales for direct delivery to the customer without handling the goods himself.

49. The ease with which branch earnings may be determined constitutes the principal advantage of the commission method. Since, under this method, the earnings of a branch depend upon its turnover rather than upon the margin between the cost and sale price of merchandise, there is no problem of inventory valuation. Likewise there is no need for the local authorities to enquire into foreign costs of production, the investment in foreign plants, or the like. The net profit of a branch may be computed by applying a reasonable rate of commission to sales receipts and deducting branch operating expenses. Branch sales may be readily ascertained and verified. The reasonableness of a rate of commission may be tested by a study of operating statistics and by comparison with independent concerns. Branch expenses, moreover, are likely to consist largely of items locally paid or of supplies furnished by the home office, and such charges as a rule can be verified without great difficulty. A more difficult problem arises, however, in connection with those general overhead expenses which cannot be assigned specifically to any branch of an enterprise. As all the general overhead expenses are very likely to be included in and covered by the selling price of the product itself, it is doubtful if there should be any apportionment of these to a sales branch compensated on the commission basis.

50. Opposition on the part of certain tax administrators to the use of a commission basis for the determination of branch profits is probably due to dissatisfaction with the rates employed rather than with the method itself. Nominal commission rates which really constitute nothing more than a brokerage charge are obviously inadequate and inappropriate for branches engaged in merchandising. Such rates are appropriate for branches which conduct the equivalent of a brokerage business, but merchandising usually involves advertising, the carrying of a stock of goods, the management of sales campaigns and the making of collections as well. Broad functions such as these require that the branch be given a correspondingly large share in the total profit. They require, in fact, that the rate of commission allowed to a branch be comparable to the rate of gross profit normally realised by independent concerns engaged in the same kind of business.

¹ For illustrative entries, see Appendix B.

51. Were it not for the delicate problem in connection with the risks incident to ownership, it would be possible to say that the commission allowed to a sales branch should be equal to the margin of gross profit demanded by independent dealers who perform the same functions. It is generally maintained, however, that, in contracts with independent dealers, commission rates are normally lower than margins of gross profit because of the lesser risk incurred by dealers who do not buy goods in advance of sale.

52. If business in the trade is commonly transacted through commission agents, then branch commissions should be at the same level if functions are the same. Any attempt to enforce higher branch rates in ascertaining taxable income would simply force the business into other channels. If in another trade, however, goods are commonly purchased outright, the branch commission would be approximately equivalent to the average gross profit margins, less an amount corresponding to the risks of ownership which are not borne by the branch. The adjustment in respect of such an intangible factor as risk will of course be difficult.

53. In judging the reasonableness of a branch commission rate, the functions of the branch must be given careful consideration. Low commission rates and low profit margins for independent dealers may sometimes be made possible by the fact that the manufacturer carries the burden of advertising the product to ultimate consumers. If this function is handled by a branch and not by independent dealers or commission agents, it is obvious that an allowance for this factor must be made in comparing rates. The problem is complex, but not insoluble, since, in a given trade, branch organisation is likely to run parallel to that of independent units in the same line. An analysis and comparison of results shown by branches and independents should at least provide the basis for a reasonable agreement on commission rates. Once accepted, these rates would not have to be changed often.

54. As the commission is measured by a percentage of turnover, it may happen that the sales branch will show a profit on sales which resulted in a loss to the company, whether the loss is due to a reduction in price or in volume of sales. This situation, however, is not likely to occur, except in the case of dumping¹ or an extraordinary fall in prices or in the value of currency in the country of sale. Ordinarily an enterprise will not produce and ship goods for sale in another country unless there are good prospects of realising a profit. Nevertheless, it would seem reasonable to establish a rule to the effect that a corporation should be permitted to reduce branch commission rates if it can show that the proceeds remaining after deducting existing commission rates from sales receipts is less than the production cost of the goods sold. It would seem to be a sound principle that, except in unusual conditions, goods should not be billed directly or indirectly to a sales branch at less than the cost of production.

55. In the list of allocation methods, the commission basis was placed first, not only because it provides the simplest method for determining the profits of a sales branch, but also because it avoids the difficulties which arise in connection with unrealised profits in branch inventories. Unrealised profits appear whenever inter-branch transfers are treated as sales and billed by the manufacturing division at more than cost. It would seem to be wise to avoid this difficulty in so far as possible, rather than to seek a more or less complicated remedy.

56. The final argument in favour of the commission basis is a very practical one. There is a grave question whether a country can regularly collect an income-tax on branch profits which are in excess of the normal rate of commission or the normal rate of gross profit earned by independent concerns. If an attempt is made to tax a substantial part of the profits which may be attributable to the goodwill of the manufacturing company abroad, taxpayers are likely to seek

¹ *Infra*, paragraphs 110 to 115.

methods of avoidance by the use of subsidiary companies, nominees, or other devices. The commission basis has the advantage of yielding a higher amount in proportion to increases in prices and volume of sales. It may still be argued that this basis does not give the country in which the sale occurs a sufficient share of very high profits, but the regularity of profits determined by the commission method should compensate for this in the long run. Other methods of allocation will be presented, but none of them compare with the commission method in simplicity and directness of approach.

CHAPTER V

THE INDEPENDENT DEALER PRICE METHOD.

57. If for any reason the commission basis is not applicable or desirable in computing the income of a branch, a so-called independent dealer price or factory price may be used. The price to an independent dealer for manufactured goods frequently is arrived at by a percentage discount from the "list price" at which the goods are to be sold to customers. This price, under normal conditions, falls between the cost of production on the one hand and the final selling price to customers on the other, and thereby effects a division of profit between the manufacturing division and the sales branch which disposes of the goods. The use of this method of accounting for inter-branch transfers of goods implies that each branch is to be viewed as a separate business unit and treated as nearly as possible like an independent concern. This of course entails either allocating to this branch the expenses and losses incident to the transfer, presumptively, of ownership of the goods to the sales branch which can be facilitated by allotting to it an adequate capital.¹

58. Between independent concerns, prices are determined by bargaining, a procedure seldom available in inter-branch pricing. There are, however, a few concerns which base the remuneration of branch managers directly or indirectly on the rate of return earned on the branch investment. Where this is done, branch managers are likely to watch billing prices very closely, and their interest in obtaining favourable prices on goods received from or shipped to other branches of the same company to some extent introduces an element of independent bargaining. There are two objections to this arrangement. In the first place, it may cause dissension and competition between managers whose co-operation is essential, and, in the second place, the managers, though they may influence, cannot control inter-branch prices. The central management has the final vote in deciding what the prices shall be, and its vote may be cast with ends in view other than the equitable division of profit between branches. It is therefore apparent that, since inter-branch transactions can never be made at arm's length, no process of intra-mural bargaining can be depended upon to fix inter-branch prices correctly and without bias.

59. In the absence of direct bargaining, the next step is to seek an independent criterion established by the bargaining of others. If the commodity in question has a world market and quoted market prices are available at all stages in the process of production and distribution, *these market prices offer the best possible basis for inter-branch pricing*. They are broadly based and can seldom be controlled by any single concern in its own interest. Their use gives a true picture of the real economic value of a branch. Suppose, for example, that a manufacturing branch which bills its entire production to other branches at current market prices consistently shows a loss. That does not indicate an error in pricing; it simply indicates that the manufacturing branch is not earning its keep, that the concern can buy more cheaply than it can manufacture the commodity. This, of course, is based on the assumption that qualities are comparable and that the quoted prices

¹ *Infra*, Chapter, IX, paragraphs 134 to 137.

apply to the quantities which the concern in question actually handles. If the grading of the commodity is not standardised, or if the quoted prices are based on small volume, the method of billing at the market price becomes less reliable and may even cause a distortion of results. Market prices, however, even though they may be far from perfect, have this tremendous advantage — they are not influenced by considerations of tax liability. They should be used whenever possible.

60. For the great variety of patented or branded articles market prices are, of course, unavailable. Here it is sometimes possible to use a so-called independent dealer price or factory price. A manufacturing concern may distribute its product partly through its own branches and partly through independent dealers. Where this is done, satisfactory results may, under certain conditions, be obtained if the branches are charged the same price as the dealers. The prices so determined are really semi-independent ; they are established by a process of bargaining between the company and the independent dealers, and sometimes the one and sometimes the other side will have the greater bargaining power. The prices, moreover, to different dealers may not be the same. Furthermore, although a company may distribute only a small proportion of its total production through independent channels, the use of the independent dealer price for inter-branch invoicing implies that the entire product of the company could be sold to independents at that price, an assumption contrary to fact in many cases. If these limitations are kept in mind, the price charged to independent dealers may furnish a good criterion by which to judge the reasonableness of inter-branch prices. The independent dealer price will be satisfactory as a basis for invoicing goods to branches, if a substantial part of the company's product is regularly distributed through dealers who are charged a uniform price and who operate under conditions similar to those at the branches with respect to volume of business and character and size of the territory served. Where these ideal conditions do not exist, some allowance for differences will have to be made in fixing inter-branch prices. Where the differences are marked, the method cannot be used directly, but it will serve as a rough check on the reasonableness of prices charged to branches.

61. If neither " market prices " nor representative prices charged to independent dealers are available, inter-branch billing prices may be constructed from internal data, or fixed according to informed judgment of a company's own executives. Methods by which a factory price may be constructed will be considered in the following chapter, but neither a constructed price nor a price fixed by company executives can be regarded as independent. Independent prices must be obtained on the open market or by reference to actual contracts with dealers operating on the same scale as the branch in question. An independent factory price established on this basis meets two of the three objectives mentioned in the preceding chapter. It allocates to each branch the profit which it would earn if it were operating as an independent entity, and it obviates the need for extensive enquiry into the world business of an enterprise. It does not, however, safeguard the manufacturing establishment from taxation on an unrealised profit in respect to unsold goods. In order to meet this second test of reasonableness it is necessary to provide a method of adjusting the accounts of the manufacturing division for the element of unrealised profit in branch inventories. The necessity for this adjustment and the method of making it can be most easily shown by an illustration.

UNREALISED PROFITS IN BRANCH INVENTORIES.

62. A manufacturing plant in one country, it will be assumed, ships merchandise which cost \$75,000 to a sales branch in another. The merchandise, however, is billed at \$100,000, which is \$25,000 in excess of cost. As a result, the manufacturing plant shows a book profit of \$25,000 not yet actually realised by sales to outside concerns. The company as a whole obviously realises no profit on the inter-branch transfer itself, but it does realise a profit when the goods are sold to an outside purchaser. If this sale occurs in the same fiscal period as the inter-branch transfer, the taking up of a manufacturing profit a short time before its actual realisation by *bona-fide* sales to

outside parties causes no accounting difficulties. Suppose, however, that 40 per cent of the goods remain unsold at the end of the period and appear in the inventory of the sales branch at a value of \$40,000. Since these unsold goods cost only \$30,000 (40 per cent of \$75,000), it is apparent that the branch inventory figures include \$10,000 of manufacturing profit, which has not yet been actually realised. In preparing consolidated financial statements for the company and all its branches, this unrealised profit would be eliminated; that is, the carrying value of the unsold goods would be reduced to cost, \$30,000. From the point of view of the company as a whole, this adjustment is necessary, since it would be grossly improper to treat as profit a mere mark-up incidental to an inter-branch transfer of goods.

63. An adjustment of this kind, however, is inconsistent with the idea that branches are separate business units, unless it be assumed that the original transfer was a consignment rather than a sale. If the manufacturing branch had sold the goods to an independent purchaser there would have been no adjustment for unrealised profit, even though the goods remained unsold on the dealer's (buyer's) shelves. Consistency would seem to require that no such adjustment should be made with respect to goods held by a branch operated on a trading basis, but, since the taxing of manufacturing profits which have not been actually realised is unduly severe, tax authorities may properly permit the home office on its return to eliminate the unrealised profit. This is equivalent in effect to placing the branch on a consignment basis¹ and is therefore not at variance with accepted business practice. In this connection, it should be noted that, on sales made to a subsidiary company or to an independent dealer, losses may be shifted back to the manufacturing company in the form of bad debts. If a dealer is compelled to sell goods at a loss, he may be unable to pay for them, and all or part of the loss may fall on the manufacturer. Since a concern could hardly be allowed a deduction for losses on bad debts for merchandise transferred to its own branches, it should be allowed to eliminate unrealised profits from its taxable income.

64. There are several methods by which this elimination can be made, but all lead to practically the same result. At the time of the original transfer, it may be assumed that the manufacturing branch (at the home office) made an entry debiting branch current account and crediting sales to branches (or shipments to branches) for \$100,000, and that it also made an entry debiting cost of sales to branches and crediting finished goods for \$75,000, the cost of goods transferred. At the end of the year the following entry could be made to defer the unrealised profit in the 40 per cent of the goods which remain unsold.

Sales to branches	\$	\$
	40,000	
Cost of sales to branches		30,000
Reserve for unrealised profit in branch inventories		10,000

The reserve account indicates that the branch current account is overvalued to the extent of the unrealised manufacturing profit included in the branch inventory.

65. At the beginning of the following year, the above entry would be reversed as shown below.

Reserve for unrealised profit in branch inventories	\$	\$
	10,000	
Cost of sales to branches	30,000	
Sales to branches		40,000

The effect of these entries obviously is to defer the manufacturing profit to the year in which the goods are sold outside the organisation. This should not ordinarily have much effect on the tax finally paid, unless the tax rate is changed, but it would defer the tax to the year in which the profit was actually realised by the company.

¹ Illustrative entries for transactions with branches operated on the consignment basis are given in Appendix B.

66. Another question arises with respect to this unrealised profit. If the goods are finally sold at a loss, should the profit included in the original billing price be eliminated permanently from the income of the manufacturing branch? It is, of course, true that a manufacturer would ordinarily assume no part of an independent dealer's loss and that, by analogy, the manufacturing division of an enterprise should make no allowance for losses suffered by a so-called independent sales branch. There is force, however, in the argument that a concern should not be taxed on a profit which was not actually realised when the goods were sold to outside parties. In the illustration just given, if the unsold goods valued at \$40,000 in the branch inventory were later sold for \$36,000, it would seem more logical to assume that there was a realised manufacturing profit of \$6,000 and no sales profit than it would be to assume that there was a manufacturing profit of \$10,000 and a sales loss of \$4,000.

67. If this view is accepted, the necessary adjustments in the accounts can be made quite easily. When the goods are actually sold at less than the billed price, or when it becomes apparent that they will have to be sold at a sacrifice, the sales branch could request an allowance sufficient to reduce the intra-company billing price to the amount which it had obtained or would be able to obtain from customers. At the home office, this allowance would be recorded as a debit to sales to branches and as a credit to Branch X current account for \$4,000. The branch, at the same time, would make an entry debiting the home office current account for \$4,000 and crediting an account which might be called purchases or preferably merchandise from home office. For the sake of definiteness, it is recommended that allowances of this kind be limited to the difference between the actual selling price of the branch and the original billing price, or to the amount of manufacturing profit included in the goods, whichever is smaller. By this method, the more serious injustices may be corrected without necessitating a complete redetermination of inter-branch billing prices.

INTER-BRANCH EXPENSE CHARGES.

68. If a branch is sufficiently autonomous to be treated for accounting purposes as a separate business unit, most of its expenses are likely to be covered by direct payments made by the branch itself. It is inevitable, however, that there will be some inter-branch expense charges and under some circumstances these charges may constitute a substantial part of the entire cost of operating a branch. Inter-branch charges fall into two general classes: (1) direct charges for supplies furnished or specific services rendered, and (2) apportioned charges representing the share of a given branch in those general expenses which cannot be specifically assigned. When direct charges are substantial in amount, the problem of pricing becomes important. Theoretically, an autonomous branch should be charged at current market prices for all supplies received, but this in many instances is equivalent to cost. If a home office merely buys supplies in large quantities and distributes them to the different branches as needed, the practical method of procedure would be to charge each branch for the actual cost plus handling charges. It might be possible to use a slightly higher price in order to give the home office the full benefit of the saving effected by purchasing in large quantities, but ordinarily such a refinement in making charges for purchased supplies seems unnecessary.

69. A different situation exists, however, in connection with supplies or materials manufactured by the enterprise itself for the use of its domestic and foreign branches. A large industrial concern might, for example, construct and operate a factory to supply boxes or cartons for the use of sales branches in packing and shipping the product. The box factory, if all accounts are placed on an independent basis, would be viewed as a separate undertaking to be operated at a profit. The boxes which it produces should, therefore, be billed to other branches of the same enterprise at market prices. The same rule would apply to any other independently operated service department or branch. No branch, however, should be compelled to pay more for supplies or services obtained from other branches of the company than it would have to pay if the same items were secured from independent sources.

70. Charges for direct services rendered should follow the same rules which govern the charging of supplies. The pricing of services is more difficult because recognised market or customary prices are seldom available, and the determination of the cost of the given service is usually difficult. Cost would seem to be the most reasonable basis for ordinary inter-branch service charges, but when the rendering of the service is regular and substantial enough to be placed on a commercial basis, it should be charged to branches at a price which will assign a commercial profit to the service function. It is conceivable, for example, that a company might operate an electric power plant in one country and furnish power to another branch of the company across an international boundary. Under such circumstances, it would be desirable to charge the branch for power at the rate which it would pay to a public utility for the same service. All services, however, which are not thus operated on a commercial basis should be charged to branches as nearly as possible at cost.

GENERAL OVERHEAD EXPENSE.

71. Quite a different problem arises in connection with expenses which are incurred for the benefit of the enterprise as a whole. It is apparent that a branch, even though it operates as a separate business unit, must bear its share of the general overhead of the concern and its share of the costs of branch supervision incurred by the home office. The problem, however, is to make sure that a sales branch does not bear a double charge for these items. It is a fundamental concept of separate accounting that inter-branch charges for merchandise are to be priced at the market, or, in the absence of quoted market prices, at a price which an independent dealer would pay under similar conditions. Now what do such prices include? Normally, if a concern is to survive and prosper, the selling price of its product must cover all production costs, selling expenses, and general administrative expenses, and leave a reasonable margin of profit. If the same price is applied to a branch it would seem to include the same elements, but this is not quite true. When goods are distributed through independent dealers, the manufacturing concern must first make sales to dealers, and the dealers must then make sales to ultimate consumers or even to other dealers. In this scheme, there are at least two points at which sales resistance must be overcome, and this requires two types or divisions of selling expense — namely, the selling expense necessary to effect the distribution of goods to dealers, and the selling expense which dealers must pay in distributing the goods to customers. This situation is changed when a concern elects to distribute through its own branches. The sales effort and selling expense required for making sales to dealers are eliminated and in their place we find the costs of branch supervision.

72. No statistical data are available to support a conclusion that the costs of branch supervision are less than the costs of effecting sales to dealers, but it is obvious that, in the opinion of the management of companies which distribute through their own branches, this method has some advantages over the method of distribution through independent dealers. It may be assumed that a part of this advantage is due to the fact that the costs of branch supervision are less than the selling expense which otherwise would be necessary. If this assumption is true, the independent factory price would obviously be sufficient to cover all the costs of branch supervision. It would seem, therefore, to be unnecessary to make an apportionment of such costs to the different sales branches.

73. The question whether an apportioned charge to cover the costs of branch supervision should be made in addition to the charging of an independent factory price for merchandise transferred is one of extreme difficulty. It is clear that the independent price includes at least all overhead expense which relates directly or indirectly to factory operation. It is likewise clear that this price must be presumed to include an allowance to cover the cost which would be necessary in effecting sales to independent dealers. When the costs of branch supervision are substituted

for these selling costs, a net saving may or may not result ; in any event, no accounting methods are available by which the amount of a saving of this kind can be determined. The fact is that the interrelationships between costs and prices at this point are so complex as to baffle any attempt at complete analysis. This much, however, can be said with safety. When a sales branch obtains all or substantially all of its stock in trade from a manufacturing branch of the same company and pays the same prices that an independent concern would pay, the presumption is that the billing price includes the branch's fair share of the general overhead of the company and the costs of branch supervision. This is a presumption only, and it must be recognised that there may be circumstances under which a charge against a so-called independent sales branch for managerial services would be entirely proper. The point here insisted upon is simply that a branch should not be charged with both the market price of merchandise and the full share of the general company overhead which would be properly chargeable against a branch which was billed at cost for merchandise from the home office. The management charge against a branch, if allowed at all, must not be large enough to cause duplication of this kind.

CHAPTER VI

THE CONSTRUCTED FACTORY PRICE METHOD.

THE COST APPROACH.

74. If independently determined commission rates or dealers' prices cannot be obtained, inter-branch prices may be constructed by means of a careful analysis of internal data and applied in lieu of the independent dealer's price described in the previous chapter. This is the cost approach. It requires a complete system of cost accounting, not only for factory operations, but also for administrative and selling activities. Since only the barest outline of cost accounting methods can be given here, the reader who wishes a more complete discussion is referred to an extensive literature on factory cost accounting,¹ and to the beginnings of a literature on the analysis of distribution costs.²

75. The operating expenses of an industrial enterprise may be grouped in three broad classes — namely, direct material costs, conversion costs and distribution costs. Operating income consists almost entirely of income from sales. The net operating profit which we are attempting to allocate is obtained by deducting the sum of the three classes of expense from sales, as shown in the following condensed statement :

Sales		xxxxx
Less :		
Cost of materials in goods sold	x	
Conversion cost of goods sold	x	
Distribution cost of goods sold	x	
Net operating profit ³ (or net profit on sales)	—	xxx
		xx

¹ BLISS, J. H. : " Management through Accounts ", Ronald Press Co., New York, 1924.

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SANDERS, T. H. : " Industrial Accounting ", McGraw-Hill, New York, 1929.

² CASTENHOLZ, W. B. : " The Control of Distribution Cost and Sales ", Harper and Brothers, New York, 1930.

HILGERT, J. R. : " Cost Accounting for Sales ", Ronald Press Co., New York, 1926.

PATON, W. A. : " Accountants' Handbook ", Ronald Press Co., New York, 1932, Section 22, pages 1329 to 1364.

³ In order to ascertain the final net profit which is presumed to be the taxable net income, it would be necessary to add non-operating income and to deduct non-operating expense. Items of non-operating income and expense, such as interest received or paid, are usually definitely allocable, and do not enter in any way into the allocation of the joint profit on sale.

76. It should be possible to prepare a statement of this kind, not only for the business as a whole and for each branch, but also for each line of product manufactured and sold. As a matter of fact, it should be possible to obtain these figures for each lot of merchandise handled. In order to accomplish this result a complete departmentalisation of the accounts and a careful analysis of all costs by lines of product are necessary. Many industrial enterprises have accounting records which supply all this information with respect to material and conversion costs, but only a few make adequate analyses of distribution costs. Until distribution cost accounting methods are more fully developed and more generally used, the amount of distribution cost applicable to a given line of product will remain rather nebulous. In the meanwhile, one is compelled to accept rather rough approximations.

77. The division of all operating expenses into two classes is somewhat unusual. The more common practice is to divide them into production costs (material costs plus conversion costs), selling expenses and general administrative expenses. Selling expenses, however, constitute only a part of the cost of distribution and this part, naturally, is less significant than the whole. General administrative expenses may be placed in a separate class on the theory that administration is a distinct function, but many of the items commonly grouped under this head relate rather definitely to production or distribution, and the others may be apportioned. The function of administration, after all, is simply to co-ordinate and direct the production and sale of goods. The costs of administration can be allocated to branches with much greater assurance if they are first divided between production and distribution. The portion which applies to production then follows the product, and only the remaining portion has to be considered in relation to sales branches. Some concerns may find it inconvenient to follow this dual classification, but it offers the most logical approach to the problem of allocation. Since any presentation of methods of expense analysis must necessarily be rather complicated and technical, and since some of the suggested methods are controversial, the discussion of them has been placed in Appendix B. In the further consideration of the problem of constructing a factory price from internal data, it will be assumed that an adequate cost system is in use.

COST-PLUS BASIS FOR CONSTRUCTING A FACTORY PRICE.

78. The joint profit resulting from the manufacture of goods in one country and their sale by a branch in another may be divided by constructing an inter-branch billing price which will fall between the cost of manufacture and the final selling price. A factory price of this kind may be constructed by adding to cost an allowance for manufacturing profit. This allowance may take the form of a fixed rate of return on investment in manufacturing facilities or a fixed percentage on cost. Among corporations which use factory prices in billing to sales branches, a common procedure seems to be to add an allowance for interest on the investment in manufacturing facilities, and to consider all remaining profit as belonging to the sales division, but this is hardly the method that an independent manufacturer would follow.

79. In constructing a factory price by this method, it is necessary first to decide upon a reasonable rate of return on the investment in manufacturing. There is no generally recognised rate which can be applied, but it ought to be somewhat in excess of ordinary interest ; from 7 to 9 per cent, perhaps. The rate would have to be higher than ordinary interest in order to justify the investment, but it should not be higher than is necessary to obtain capital. The ideal rate is the one which would be just sufficient to induce an independent capitalist to make the investment in manufacturing facilities under an agreement with a sales company to market a reasonable volume of the product. A reasonable rate may usually be computed by considering the profit requirements of the company. These include interest on indebtedness, preferred and common dividends and an allowance for income-tax. The sum of such items may first be apportioned to manufacturing and

selling in the ratio of the investment in production to the investment in distribution. Then some allowance should be made for necessary additions to surplus in each division, usually a small amount in the manufacturing division, say from 1 to 3 per cent. This allowance, plus a proportionate share of the interest, dividend and tax requirements, indicates the minimum profit which the manufacturing division ought to earn if the enterprise is to prosper.

80. The required manufacturing profit thus estimated may now be expressed as a percentage of the manufacturing investment and applied to the total investment of each department in the plant. By this method, each department is charged with its proportionate share of the required profit. This charge must now be distributed to the various lots or units of product handled in the department. The distribution to the product may be made according to direct labour cost, direct labour hours, or machine hours, or by other methods, but, whatever the method, it is important to base the computations on average or normal operating capacity. For example, if the profit requirement assigned to a given department were \$1,000 per month, the direct labour hours per month at maximum capacity, 10,000, and the average direct labour hours per month, 6,000, the profit requirement per direct labour hour would be 1,000 divided by 6,000, or $16\frac{2}{3}$ cents, not 1,000 divided by 10,000, or 10 cents. After the hourly rate of $16\frac{2}{3}$ cents has been established, each product would be charged $16\frac{2}{3}$ cents for every hour of direct labour applied to it in the given department. This method of distribution — the same that is used in distributing overhead expenses — makes it certain that each product will be charged with a reasonable amount of profit.

81. After all manufacturing expenses and the required manufacturing profit have been distributed to the product, an inter-branch billing price may be computed by simple addition as shown below :

Cost of materials.		x	
Conversion cost :			
Direct labour.	x		
Factory overhead.	x		
Manufacturing profit	x		
			<u>xxx</u>
Factory price			xxxx
Handling charges — Export Dept.			x
Billing price to foreign branch			<u>xxxxx</u>

82. The use of this price will provide a reasonable return on the investment in manufacturing when the plant is operating at average capacity. A somewhat higher return will be earned when the volume of business is above average, but this will be offset by much lower earnings in periods of subnormal activity. Under this method of pricing, there is more danger that a manufacturing division will fail to earn a reasonable return on its investment than there is that it will earn an excessive return.

83. A simpler version of the method just described is to determine the manufacturing profit by adding a fixed percentage to production cost. Unless the percentage to be added is carefully computed, however, results are likely to be arbitrary. Moreover, the inclusion of material costs in the base on which profits are computed is likely to cause a distortion of profit due to fluctuations in material prices. About the only advantage in using a fixed percentage of this kind is that it simplifies the accounting, especially in computing the amount of unrealised profit to be eliminated from branch inventories.

84. The method of constructing a factory price¹ by adding a fixed percentage or a fixed amount of manufacturing profit to cost is only fairly successful in accomplishing the objectives established in Chapter II. The method of pricing at cost plus a fixed and limited profit is not often used in dealings between independent concerns. It places the manufacturing division in a preferred position so far as the earning of interest on investment is concerned, but prevents it from participating in higher profits. It definitely assumes that manufacturing is a subordinate function so far as the earning of profit is concerned. Prices fixed in this manner, however, are probably about what a relatively small manufacturer would get if he sold his entire output to a large organisation which could easily do its own manufacturing. If the manufacturing function is thus relatively less important than selling in the profit-making scheme, prices fixed on a cost-plus basis may correspond roughly to those which would apply to the transactions of independent concerns under similar conditions.

85. The cost-plus basis, however, like all methods which involve inter-branch pricing in excess of cost, raises the problem of unrealised profit in inventories. If this profit is not to be taxed, it must be eliminated by the methods described in Chapter V.² Some difficulty may be met in computing the amount to be eliminated, but a satisfactory approximation can always be made.

86. No method which is based upon cost analysis can meet the third requirement mentioned in Chapter III³—namely, that profits be allocated by the use of data which can be verified in the country in which the branch is located. The profits of manufacturing branches may be readily verified where the cost-plus basis is used, but in order to test the reasonableness of an inter-branch billing price, the tax authorities in the country in which a sales branch is located would have to enquire into foreign production costs. In spite of these objections, the method has much to commend it. From the internal point of view, it is much the easiest way of constructing an inter-branch price. It is fairly definite, easily understood, and in rather common use. Where prices so constructed are used for tax purposes, however, the authorities will have to accept the taxpayers' declarations of costs, or they will have to rely on comparative figures and external data to test the reasonableness of prices. Detailed enquiry into cost accounts kept at a foreign plant will ordinarily be impossible.

87. From a practical point of view, the chief advantage of using a factory price constructed on a cost-plus basis is that it does not depend on an analysis of distribution costs. Many concerns keep adequate records of production costs, but only a few have devoted the same attention to distribution costs. Since all methods of allocation hereafter discussed require an analysis of

¹ An interesting method for arriving at a factory price has recently been suggested by Mr. James, consulting accountant with the firm of Stevenson, Jordan and Harrison, New York City. (JAMES, Charles C. : "What Use can the Sales Manager make of Manufacturing Costs ?" ; *National Association of Cost Accountants' Bulletin*, October 1st, 1932.) The essential feature of the method is the fixing of a price from the factory to the sales department made up of the following elements :

A fixed manufacturing profit equal to 6 to 9 per cent per annum on the investment in manufacturing facilities.....	xx
The total overhead expense required for factory operation at the existing rate of production.....	xx
The cost of direct material and direct labour in the product manufactured.....	xx
Price to sales department.....	xxx

This method of pricing is useful for managerial purposes because it focuses the attention of the sales department upon the relationship between the volume of business and the cost of production. It can hardly be used as a basis for inter-branch pricing for tax purposes, however, unless the principle be accepted that each branch shall be charged what the traffic will bear. The chief value of the method would be lost under a rule that all branches should be charged uniform prices.

² See paragraphs 62 to 67.

³ See paragraphs 31 to 33.

distribution as well as production cost, they can, at the present time, be applied by relatively few concerns. The cost-plus basis, however, may be used by many concerns without a radical change in their accounting methods.

CONSTRUCTING A " FAIR MARKET PRICE ".

88. In constructing a factory price by the methods just described, the manufacturing profit was determined without regard to the amount of profit left for the sales division. Whether there were a sales loss or a large selling profit, the manufacturing profit would remain the same. This is a one-sided, though very convenient, approach to the problem. It would be more logical and, at the same time, more difficult to consider both aspects of the problem simultaneously as an independent buyer and seller would do. The " willing buyer, willing seller " test is the one criterion which can be generally applied in judging the reasonableness of any intra-company price. This criterion unfortunately is so vague and indefinite that it almost begs the question. Some progress can be made, however, toward the establishment of objective standards which will indicate approximately the price which should result from a process of bargaining between a willing buyer and a willing seller who are well informed as to costs and prices. In other words, in the absence of a real market price, an attempt may be made to construct one which might reasonably apply.

89. The minimum price which a manufacturer can accept must be somewhat in excess of the total direct costs applicable to the commodity in question. These costs consist chiefly of direct material, direct labour, commissions on sales, etc. He would not care to sell unless he could recover at least a part of his overhead. On the other hand, the maximum price which a dealer can pay is determined by the probable selling price of the goods and the direct costs of handling and marketing them. The margin between the dealer's purchase price and his probable selling price should be at least sufficient to cover his direct costs. The direct costs of the dealer include transportation charges, Customs duties, salesmen's commissions, direct handling charges, etc. Sometimes the margin between the lowest price a manufacturer can accept and the highest price a dealer can pay is so narrow that a sale is impossible unless the manufacturer is willing to make a marked concession in favour of some particular territory or section of his market. Selling abroad at such prices is known as dumping and requires special consideration. The fact that a manufacturer may be willing to sell in a foreign market at more than his direct costs, but less than his full costs of production and distribution indicates the wide range which may exist in prices fixed by agreement between independent parties.

90. Under normal conditions, however, it may be assumed that the price will be fixed at a point which will permit both parties :

- (1) To recover direct costs ;
- (2) To recover a normal allowance for overhead expenses ;
- (3) To make a profit at least equal to interest on investment.

91. It may be assumed further that any profit in excess of the amount necessary to pay interest on the investments will be divided between the parties roughly in accordance with their relative contributions toward producing it. These relative contributions cannot be measured exactly, but if the manufacturer by extensive advertising in the territory or by other methods has created a goodwill for his product, he should be able to obtain the larger portion of the profit in excess of ordinary interest. The dealer, however, is likely to obtain this profit if he has done the advertising, and if the goodwill is in his name. With these assumptions as a basis, it is possible to work out a method of estimating or budgeting by which to construct a price which a willing buyer and a

willing seller might be expected to reach under similar circumstances. Some form of budgeting is necessary because the factors which govern independent parties in price negotiations are probable future costs and selling prices, not past costs and prices.

92. Using the figures for actual past costs and prices as guides, an estimate can be prepared showing the probable volume of sales and probable selling prices at a given sales branch, or at all sales branches if a uniform inter-branch price is to be fixed. An estimate of the probable cost of materials may next be made and deducted from the proposed selling prices in order to ascertain the amount of probable revenue available for conversion cost, distribution cost and profit. Probable direct costs of conversion and probable direct branch expenses applicable to the goods in question may be ascertained, and reasonable allowances for factory overhead and branch overhead on the expected volume of business may be estimated. The deduction of these expenses leaves the expected profit on the goods under consideration.

93. Even if all of the estimates have been accurately and carefully made, there still remains the problem of dividing the expected profit. This profit may be divided by making an allowance for interest on branch investments and apportioning the remainder in accordance with the relative importance of the functions of manufacturing and selling in the particular business, or the whole profit may be apportioned by the method outlined in the following chapter. This method will not be presented in detail here, but, briefly, it involves the apportionment of profit, in this case expected profit, in the ratio of the conversion cost to the distribution cost applicable to the specific goods under consideration.

94. When the expected or budgeted profit has been thus apportioned, the inter-branch billing price can be readily determined. It will be equal to the estimated cost of materials, plus normal conversion cost, plus the budgeted manufacturing profit, plus a charge to cover export department expenses for merchandise handling and general supervision. When the finished product is shipped to the branch it will be charged at the price thus fixed, and this will constitute the first entry to be made on the formal books of account. All the work heretofore described has been analytical in nature. It has furnished a basis for budgeting and controlling the various activities of the business and for constructing a factory price. That price is now used and recorded on the books for the first time.

95. The advantage of a price fixed in this manner is that, within the limits of its own accuracy, it measures the relative efficiency of manufacturing and selling. If the manufacturing division operates with more than average efficiency, its actual profit will exceed the anticipated profit by the amount of the savings effected. It will, on the other hand, be penalised for excessive manufacturing costs. The sales division likewise will be rewarded for selling at higher prices or for reducing the cost of distribution, and it will be penalised for excessive distribution cost and for price concessions. Under actual operating conditions, however, the sales and factory prices and the expense budgets will have to be adjusted from time to time to compensate for market changes in the cost of materials or labour and for important changes in the competitive situation.

96. The procedure here outlined for constructing an inter-branch billing price can be used only by the management of a company ; it is manifestly unavailable to tax officials because they could not possibly obtain the necessary data. They can, however, apply general tests which will indicate roughly whether the results obtained by the company's methods are reasonable — that is, whether the prices used might reasonably apply as between a willing buyer and a willing seller. If the margin between the billed price to the branch and the selling price of the goods is so narrow as to eliminate the possibility of profit on a reasonable volume of business, or if this margin is markedly lower than that realised by independent dealers in similar lines, there is an indication of

over-pricing. This becomes almost a certainty when the total profit on the goods is high. Note that the reference here is to gross profit on sales and not to net profits. A branch which has an adequate margin of gross profit may show a net operating loss due to a small volume of business or to extraordinary expenses, but such a loss should not be construed as an indication of over-pricing. Over-pricing is indicated only when the spread between the inter-company billing price and the ultimate selling price is so narrow as to preclude the possibility of adequate profit, even on a satisfactory volume of business. Very narrow profit margins for sales branches may be justified, however, when the total profit of the company on the goods handled is small or non-existent. In the final analysis a fair market price cannot be "constructed". A detailed budget may provide the facts, but they must be interpreted and applied in accordance with the judgment of individuals familiar with conditions in the industry.

CHAPTER VII

APPORTIONMENT OF JOINT PROFIT ON MANUFACTURE AND SALE.

97. The three preceding chapters have been devoted to the discussion of methods for dividing the joint profit on the manufacture and sale of goods by the use of a sales commission, an independent factory price, or constructed factory price. Such methods aim to divide profits to accord with what each establishment would earn if it were an independent enterprise operating in a similar manner. If there is no such basis of comparison with independent enterprises, the method of fractional apportionment may be used. This basis requires that all goods be billed to branches at cost and that branch accounts be kept in such a way as to permit the determination of the distribution cost applicable to specific goods or lines of product handled. Accounts kept in this manner will reflect the total profit realised by the enterprise on the specific goods sold by a given branch, and it is this profit which must be apportioned.

98. Take the case of a company manufacturing any commodity in one country and selling exclusively through a permanent establishment in another. For the sake of simplicity, the countries may be assumed to be the United States of America and Canada, since both have dollar currencies which may be assumed to exchange at par. At the plant are kept all factory cost accounts, including materials, labour and overhead, and the accounts for the investment in the land, buildings and equipment of the factory, and inventories of materials and work in process. All selling-expense accounts, including salesmen's salaries and commissions, advertising, etc., and all trade accounts receivable, finished goods inventories and land, buildings and equipment used in distribution are kept at the sales branch. Operating cash funds are kept as needed at each branch. The general administrative officers spend part of their time at each branch and their salaries and expenses are charged accordingly. Almost the only expenses to be apportioned are the directors' fees and expenses and other general corporate expenses. Under such conditions, a clear-cut division of the business into its primary functions of production and distribution can be readily obtained.

99. By combining the accounts of the two branches of such a business, a statement in the following form could be obtained.

Operating Income Statement.

	\$
Sales	125,000
Less cost of materials	25,000
Value added in manufacture	<u>100,000</u>
<i>Deduct:</i>	\$
Conversion costs	40,000
Distribution costs	<u>20,000</u>
	<u>60,000</u>
Net operating profit	40,000

The investment in production may be assumed to be \$150,000 and the investment in distribution may be taken as \$50,000.

100. The question now is how to divide the \$40,000 of profit between the manufacturing branch in the United States and the sales branch in Canada. It might be apportioned according to the relative investment in each branch, in which case the manufacturing branch would be credited with \$30,000 and the distributing branch with \$10,000. Such a division, however, places far too much emphasis on the single factor of investment. Since earnings are at the rate of 20 per cent on total investment, the accidental circumstance of owning or renting the real estate at one or the other branch would materially affect the apportionment. Not over 8 per cent on the investment, or \$16,000, can properly be apportioned on this basis. Another method would be to apportion the net profit of \$40,000 in the ratio of conversion cost to distribution cost. This is more logical because it includes a number of factors, not merely the one factor of investment. Applied to the illustration, this method would assign two-thirds of the total profit ($\frac{\$40,000}{\$60,000} \times \$40,000$), or \$26,667, to the manufacturing branch, and one-third ($\frac{\$20,000}{\$60,000} \times \$40,000$), or \$13,333, to the sales branch.

101. This method deserves the most careful consideration. If its soundness can be substantiated it can be used either as a basis for constructing an appropriate factory price or as a method of apportionment which will give far better results than the general allocation fractions now commonly used. The logic behind the method is that profits are earned by the expenditure of effort, that different types of effort can be quantitatively measured and compared only in terms of money cost and that the relative amounts of production cost and distribution cost, therefore, reasonably reflect the relative importance of the two divisions of a manufacturing business and the appropriate share of each division in the net operating profit.

102. The management of every business faces the problem of budgeting the total expenditure. More may be spent on production and less on distribution, or *vice versa*. If too little is spent for production, the product will be inferior and, on that account, difficult to market. On the other hand, if too much is spent for production and too little for distribution, an excellent product may fail simply because it has not been brought to the attention of consumers by suitable advertising and selling methods. A certain balance between the two types of expenditure is essential and the management of each company is in the best position to know what the proportions should be. Although there are undoubtedly mistakes of judgment and differences in efficiency, it may be assumed in each case that the actual expenditures for production and distribution are in the correct proportions. This assumption is justified because there are no absolute measures either of efficiency or of wisdom in budgeting expenditures. Thus, in the illustration, it may be assumed that an expenditure of \$40,000 for production and \$20,000 for distribution gave the highest net return, and that the shifting of one dollar from production cost to distribution cost or *vice versa* would have resulted in a lower net return. If the management correctly diagnosed the situation, the highest net profit was obtained by devoting $66\frac{2}{3}$ per cent of the total expense¹ to production and $33\frac{1}{3}$ per cent to distribution. It does not seem unreasonable to assume that these percentages represent the relative importance of the two primary functions.

¹ The total expense used in making this computation must include depreciation of capital assets as well as current expenses paid in cash. Otherwise the relatively heavy investment in production facilities would be ignored. It should be noted that depreciation and some other expenses are "sunk costs" no longer subject to control by the management. To the extent that such costs may be larger in production than in distribution they may cause the ratio to be somewhat biased in favour of the manufacturing function. If these costs are excessive, however, it usually indicates that the original investment of capital in the enterprise was not justified. Under such circumstances, there will usually be no profit to apportion and the question of including or excluding these costs from the ratio becomes purely academic so far as the income-tax is concerned.

103. The argument which has just been presented seems logical enough and it may well be that a statistical study of the expenses of a large number of business concerns would show that on the average the relative amounts of conversion cost and distribution cost do indicate the relative importance of the manufacturing and the selling functions. It must be admitted, however, that, in many individual instances, this is not true. The profits of one concern may be due to the control of some particularly efficient process of production or to a source of supply of raw materials of a peculiar quality. Or the profits may be due almost entirely to effective advertising and selling. Facts of this nature ought to be recognised in making an apportionment of profit between the manufacturing and selling functions, but no quantitative measure of such intangible factors can ordinarily be obtained. In staple and raw material industries, the concerns which show the higher profits are likely to be the low-cost producers. Since sales prices are determined by market quotations, there is little room for sales effort. At the opposite extreme are the manufacturers of patent medicines and some other branded, trade-marked or patented articles. Manufacturing cost in such industries may be of little significance ; their success or failure is likely to depend primarily upon effective selling. The great majority of business enterprises fall between these two extremes. It will be found in general that conversion costs will be relatively high and distribution costs relatively low in those industries in which production is the essential function. The opposite condition will prevail in those businesses in which the marketing function is the more important. It cannot be said that the ratio of conversion cost to distribution cost gives an exact indication of the relative importance of the two functions, but it does provide a basis for measurement which is convenient and reasonable.

104. The essential features of the method of apportionment here proposed are :

- (1) The billing of merchandise to sales branches at cost ;
- (2) The allocation of distribution cost to products in order to determine the net profit realised by the enterprise on the different products sold by each branch ;
- (3) The division of the joint profit (but not loss) as determined above between the manufacturing division and the sales branch in the ratio of conversion cost to distribution cost ;
- (4) The assignment of all losses on sales to the sales branch and all losses due to idle plant capacity to the manufacturing division. These results are accomplished by billing at the normal cost of production and by apportioning profits but not losses to the manufacturing division.

105. The method here suggested differs from other apportionment methods in a number of respects. In the first place, it calls for the apportionment of joint profits from the manufacture and sale of specific goods. It does not involve the apportionment of the net profit of a whole enterprise. Since the apportionment relates to specific goods and not to total net profit, it is possible for one sales branch to show a profit while another shows a loss. The apportioned profits are therefore more likely to coincide with the profits which would be shown by the several branches if they were operated as autonomous units buying at regular commercial prices. Under the proposed formula an apportionment can be made without enquiring into the world-wide business of an enterprise. An analysis of the production and distribution costs of specific lots or lines of product, however, must be made.

106. The suggested basis for apportionment, although necessarily somewhat arbitrary, is believed to be reasonable. Further study along this line is desirable and may lead to greater refinement, but no final or definitive solution can be expected. All apportionments must be more or less arbitrary. Were this not true, a method of direct allocation could be found. The omission

of the cost of materials from the apportionment fraction, however, produces much more reasonable results than could otherwise be obtained. If the cost of materials were included, an apportionment in the ratio of production cost to distribution cost would assign at least as much profit to a manufacturing plant which merely purchased parts and assembled them as it would to a plant which manufactured all its parts from basic raw materials. The inclusion of the cost of materials in an apportionment formula probably results in the allocation of too large a share of profit to the manufacturing division.

CHAPTER VIII

ALLOCATION METHODS FOR VARIOUS ESTABLISHMENTS.

107. The previous chapters have dealt chiefly with the problem of allocating profits to sales branches of foreign enterprises. Much of the material will apply directly or indirectly to the problems which arise in accounting for the profits of other types of branches. The problem of allocation, however, must now be considered from the point of view of the manufacturing establishment. The special problems of purchasing, processing and other types of branches will also be discussed.

MANUFACTURING ESTABLISHMENTS.

108. When the buying establishments and the sales branches of a company have introduced methods of accounting which provide for a proper allocation of profit to these units, the profits of the manufacturing branch or division are almost automatically determined. The difference between the prices paid for materials furnished, either by purchasing branches or by independent suppliers, and the prices fixed for goods transferred to sales branches constitutes the margin out of which the manufacturing division must pay the costs of conversion and secure its profit. The methods of arriving at intra-company transfer prices and the difficulties involved have already been discussed and need not be repeated. Some aspects of the relationship between the manufacturing division and the sales branches, however, must be restudied from the point of view of the manufacturing establishment. In preceding chapters we have studied principally the relationships between a single sales branch and the manufacturing establishment, usually the home office, which supplies the merchandise. It is now necessary to consider the manufacturing division in its relationships with all branches. The first question which arises is whether or not uniform prices must be charged to all sales branches. Then, if uniform prices are not required, the extent to which price discriminations among branches are permissible must be considered. This brings up the problem of dumping.

109. The argument in favour of uniform prices is that the same amount of manufacturing effort goes into an article sold by one branch at a loss that goes into an identical article sold by some other branch at a profit. From the manufacturing point of view this is correct, but the fact remains that uniform prices in transactions between independent concerns are the exception rather than the rule, and many of the factors which make for price discrimination between independents enter also into the relationships between a home office and its branches. Although the same amount of productive effort may go into each article, a manufacturing plant or division may find it desirable on occasion to accept prices which are equal to, or even less than, the cost of production. The advantage to be gained from sales at or below cost arises from the fact that production cost usually contains a considerable proportion of fixed overhead expenses which must be paid whether the plant operates at a higher or lower percentage of capacity. Where the percentage of overhead expense is relatively high, there is a powerful urge to keep the plant operating as nearly as possible at normal capacity. Otherwise, the costs of unused capacity are likely to preclude the possibility of profit. In the attempt to obtain the necessary volume of business, a sales branch may be opened in a country

in which the competitive situation, the tariff, or other factors make it apparent from the beginning that no profits in the ordinary sense of the word can be expected. The purpose of the branch is simply to obtain a volume of business which will help absorb overhead. In billing merchandise to such a branch the factory price, if it included full cost and normal profit, might conceivably exceed the ultimate selling price of the branch.

DUMPING AND DIFFERENTIAL GAINS.

II0. The question of uniform or discriminatory¹ prices from the factory to sales branches raises the familiar dumping argument which runs somewhat as follows. A company manufactures a product which it sells largely in the domestic market, but since it cannot obtain a sufficient volume of business from domestic sales to keep its plants operating at capacity, it sells abroad at marked price concessions, sometimes at less than cost. As a result of this dumping in the foreign market an additional amount of overhead expense is absorbed and the total profits of the company are increased. Up to this point the facts presented are undeniably correct. The conclusion is drawn, however, that the increase in profits caused by dumping represents a profit which should be allocated to the country in which the goods are dumped and taxed as income there. This conclusion, in my opinion, is untenable.

III. The objection to the conclusion is that it confuses differential gains with profits. The differential gain attributable to a branch is the difference between the total profit (or loss) of the company with the branch in operation and the total profit (or loss) which would have been earned without the branch in question. This differential gain, if it could be accurately calculated, would, except by the merest coincidence, be quite different from the commercial profit of the branch. And tax laws, it should be noted, apply to business profit or income as ordinarily defined, not to some vague concept of differential gain.

II2. The nature of the differential gain which arises from dumping may be more easily explained by the use of a hypothetical case. Suppose a company manufactures in one country and sells one-tenth of its product through each of ten sales branches located in ten different countries. Costs and prices are assumed to be uniform at all sales branches. Assume further that the total profit earned by the whole company is \$100,000 and that, if any one of the branches were not operated, the company would earn exactly nothing. The elimination of any branch, in other words, would reduce the total profit by \$100,000. This amount, then, is the differential gain ascribable to each branch, but if each of the ten countries should levy an income-tax on this amount, the company would be taxed on \$1,000,000 of "income" even though it earned only \$100,000. And this does not include a tax on the manufacturing establishment, the differential gain of which would be hard to estimate.

II3. Let us now suppose that an eleventh branch is organized and that it sells the same quantity of merchandise as each of the other branches, but at a much lower price. The eleventh branch, in other words, is organized for the purpose of dumping, and, as a result of the increased volume of business, profits rise to \$150,000. The differential gain ascribable to the new branch is \$50,000, but did it make that much profit? To maintain that this \$50,000 is profit of the eleventh branch would create the absurd situation of ten branches selling at regular prices and earning only \$100,000 altogether, while an eleventh branch selling one-tenth as much merchandise at much lower prices would be credited with a profit of \$50,000! What actually happens is that the new

¹ The word used here is not meant to imply that price discrimination is improper. Discrimination between branches simply means that prices are not uniform — that prices are adjusted to meet the particular conditions under which each branch operates.

branch makes it possible for the company to effect a saving. If the dumped merchandise is sold at cost — *i.e.*, at normal production cost plus distribution cost — it is apparent that the eleventh branch relieves the other ten branches of \$50,000 of overhead expense which they would otherwise be compelled to bear. This \$50,000 of overhead is made up of expenses which would have been incurred even if the capacity required to supply the additional branch were not used at all. The additional profit, therefore, is due to the more efficient use of the company's facilities for production and distribution, and not to the activity of any one branch. The benefit derived from the opening of the additional branch is in the nature of a saving, not a profit in the accounting sense of the word. If any profit at all is to be allocated to the branch which does the dumping, it cannot properly exceed the amount obtained by the following computation. First, allocate a part of the \$150,000 of net profit, say \$90,000 to the manufacturing division ; then find for each branch the margin of selling prices over direct costs — this will give the amount of revenue available for overhead and profit ; finally, distribute the profit to branches as a percentage of the margin above direct costs. By this method the branch engaged in dumping could hardly receive more than \$5,000 of the total profit. As the result of a general apportionment, this allocation may be reasonable enough, but there is a grave question whether any so-called profit of this kind should be or can be recognised in the accounts. From an accounting point of view, the safer procedure would be to follow the general rule that no profit is realised unless a sale is made at more than cost.

114. Since a branch which sells at or below cost cannot properly be said to earn a profit, the levying of an income-tax upon it can be justified only on grounds of national policy. Excellent reasons may exist for attempting to discourage the practice of dumping, but the income-tax would seem to be a very ineffective weapon. Under no reasonable system of allocation could a very large profit be ascribed to a branch selling at cost or less, and the amount of tax which could be levied would, therefore, be small. A tariff, however, acts in direct opposition to dumping. Since a tariff applies directly to every unit of the product imported, it would be far more effective than a tax on net income. In fact, as soon as the tariff becomes equal to the difference between the dumping price and the direct costs applicable to the merchandise imported, dumping necessarily ceases.

115. In any discussion of this subject, it must be remembered that dumping is hard to define, and it is difficult to distinguish between losses due to dumping and those due to the development of a new market.

BUYING ESTABLISHMENTS.

116. Buying establishments range in size and scope from mere purchasing agencies to large organisations which buy, assemble, sort, grade, and store some basic raw material for later use in manufacturing operations by other units of an enterprise. It is at once apparent that the large buying establishments which perform the functions of grading, storing, etc., are more closely related to processing establishments than they are to the small agencies which simply purchase goods for direct shipment to plants abroad. Some of the larger establishments may even do some preliminary processing in preparing materials for shipment.

117. The differences in function here represented call for corresponding differences in the accounts and they raise an important question regarding the point at which profits must be presumed to accrue to buying establishments. In both business and accounting practice it is an accepted rule that profits do not arise from purchasing. The necessity and importance of the purchasing function in the profit-making scheme are recognised, but no profit is ordinarily assigned to purchasing even though the savings effected may be substantial.

118. At all buying establishments for which this view is accepted, the accounts should be kept on a cost basis. All buying expenses should be computed and then charged against the other branches or divisions of the business for which purchases are made. In so far as possible, the direct expenses applicable to each purchase or to the purchases for each branch should be determined and charged directly either as an addition to invoices for goods or as a separate charge. Some of the expenses will, of course, have to be distributed by apportionment. As a matter of fact, it may be more convenient to distribute all expenses by this method. This may be done by adding a standard charge or a fixed percentage to the amount of each invoice. At the end of the year, any difference between the amounts thus charged and the actual buying expenses could be pro-rated among the branches served, presumably in proportion to the value of goods purchased for each. Keeping accounts by these methods for buying establishments to which no profit is assigned offers no difficulties.

119. As these establishments take on more varied and more important functions, a point is finally reached at which it becomes necessary to allocate to them a share in the profits. If buying establishments could be arranged in the order of their relative importance in their respective enterprises, there would be a continuous series beginning with the purchasing agency, consisting of a purchasing agent and stenographer, and ending with a buying organisation whose operation constitutes the principal business of the undertaking. A buying organisation of the latter type clearly deserves credit for most of the profits of the business, but the exact point in the series at which profits are held to arise will depend upon the law of the country in which an establishment is located.

120. There are two general methods by which profits may be allocated to buying establishments. One is by means of commissions or fees ; the other, by billing all goods purchased for other branches at market prices which are presumably in excess of cost. The one rests on the theory that the purchasing branch is being paid for services rendered ; the other, on the assumption that the buying establishment is trading on its own account. Since a branch which simply buys for direct shipment abroad is in no sense trading on its own account, the first of these methods should be used if the law requires that some profit be allocated to such branches. The rate would be that currently charged by brokers or commission agents who make purchases for independent concerns.

121. The accounts of the larger establishments may be based on either method. If in the exporting country there are customary fees or rates for the various services of buying, sorting, grading, packing, storing, and the like, these may be conveniently used in placing purchasing branches on a commercial basis. If the home office or other branches are charged the regular commercial rates for all services rendered, the books of the purchasing branch will show the profit which an independent brokerage or commission house would have earned on a similar volume of business. The reasonableness and the convenience of this method strongly favour its use wherever it is applicable.

122. The commission method, however, does not fully recognise the gains which may arise from skill in buying. There is no method by which such gains can be accurately measured, but an approximation can be made by treating the buying establishment as a trading business engaged in both buying and selling. In the country of export there are likely to be definite quoted prices for the graded commodity ready for export and other prices in the interior for the ungraded product. If the buying establishment "sells" the commodity to other branches of the company at the market price on the date of export, the difference between this price and the sum of all the costs of buying, grading, etc., will represent the remuneration of the purchasing branch for services rendered and the gains attributable to skill in buying. By skilful buying, for example, it may obtain quantities of the commodity which will grade higher than the average and thereby make a so-called buying profit.

123. This would be the ideal method for allocating profit to buying establishments were it not for the fluctuations in market prices which are almost certain to occur while a commodity is in process of preparation or in storage at the branch. If during this period the market price should fall abruptly, the purchasing branch would bill the commodity at less than actual cost, thereby showing a large book loss with probably no taxable income from which to deduct it. The company abroad, at the same time, would receive the goods at less than cost, and its books would show an apparent profit which was not actually realised by the organisation. The distortion of profits would be even worse if the commodity were hedged by the home office on the date of the original purchase, since under these conditions the home office would not only obtain the commodity at less than cost but it would also show a substantial profit on its hedge. Actually, the gain on the hedge would probably be about equal to the loss on the commodity, and, if the hedge were perfect, the company would neither gain nor lose on the two transactions taken together. On the other hand, if market prices had increased materially, the branch would have shown a large profit not in the least due to skill in purchasing, while the home office, in addition to paying the full market price for the commodity, would have lost heavily on its hedge. Clearly, if hedging is practised, the losses and gains on transactions in the commodity itself must appear in the accounts of the establishment which places the hedges. This matter of hedging in international trade deserves more attention than it has received from tax officials and accountants. The problem would be simple enough if each transaction in a commodity were matched by a reciprocal transaction on a futures market, but such is not the case. A concern will hedge its total position, it may delay the placing of hedges, and it will shift its future contracts from one month to another as market conditions change. All this is necessary for successful hedging, but it raises some difficult accounting and tax questions unless the hedges happen to be placed in a futures market in the importing country. This is likely to be done when possible, but goods are frequently shipped to countries in which no futures market exists.

124. Our immediate problem, however, may be solved by having goods invoiced by the purchasing branch at the market price for the assembled and graded commodity on the date on which the raw commodity was originally purchased rather than at the market price on the date of shipment. The margin between original cost and the market price of the prepared commodity on the date of purchase should be large enough to pay the branch for the services of buying, grading, etc. In this margin would also appear the gains, if any, arising from the exercise of special skill in buying. The margin, however, would not ordinarily include an allowance for the costs of storage for any period of time between the date on which the commodity was ready for shipment and the actual shipping date. A fee for storage would, therefore, have to be added to the invoice price.

125. This method of invoicing at the market price on the date of purchase rather than the date of shipment removes all gains and losses on market fluctuations from the branch accounts and centralises them at the home office which presumably effects the hedges. If a company does not or cannot hedge its position, it is still proper that all market gains and losses should appear at the home office, or other importing branch, unless the buying establishment actually trades independently. If it buys only on orders from other branches, then it is obviously unfair to ascribe to it any market gains or losses which may happen to occur while the commodity is being prepared for shipment. Tax authorities may, of course, take the view that, if an increase in market value takes place while the commodity is still in the country, a taxable gain thereby arises. This view is hardly tenable, however, since the same rule would not apply to the purchases of independent concerns with no permanent establishment in the country. It is an accounting principle, moreover, that profit is not realised when goods appreciate in value. Such appreciation could properly be taxed as profit only if the purchasing branch were treated as an independent entity purchasing on its own account, not for others. Even then it could be taxed only when the goods were actually sold. If goods are to be priced at the market on the date of purchase, some difficulty will arise in

identifying the different lots for the purpose of pricing them. Moreover, there might be wide differences in the prices charged to branches for shipments made on the same day. These difficulties could be avoided by using a weighted average market price for all shipments. This method of pricing, however, at its best is rather complicated.

126. To summarise, three general methods for handling the accounts of purchasing branches have been mentioned. These may be called the cost basis, the service basis, and the trading basis. Under the cost basis no profit whatever would accrue to a purchasing branch. Since it is a generally accepted rule that profits do not arise from purchasing, this method is to be preferred unless the other functions of the branch are important. If purchasing branches are regarded as service units which do earn profits, they may operate on a commercial basis by charging the regular fees which a brokerage or commission house, or a warehouse, would charge for similar services. The simplicity of this method commends its use if the cost method will not be accepted. Only in rare instances where skill in buying is an important factor should a purchasing branch be treated as a trading business. Complications in connection with hedging and with the treatment of market gains and losses generally make this method of handling inter-branch transactions unsatisfactory.

PROCESSING ESTABLISHMENTS.

127. Processing establishments are, of course, engaged in manufacturing, but they will here be distinguished from manufacturing establishments by the fact that they do not perform the whole manufacturing process. They may be engaged in the preliminary work of preparing some raw material for use in later manufacturing operations, or in intermediate processing.

128. The establishments of each of these types have their own peculiar problems. Preliminary processing establishments, however, in many respects so closely resemble the more complex buying establishments that the same rules may be applied to both. Both are engaged in preparing a commodity for later use, one by assembling, grading and sorting it, the other by changing its form. The profits of preliminary processing establishments, therefore, may be determined on the basis of regular commercial fees for services rendered or by the use of current market prices for the commodity in a prepared state.

129. A different situation exists with respect to intermediate processing establishments because of the fact that they both receive material from and send it to other units of the same enterprise. As a rule, there is no independent price at either the beginning or the end of the process. If quoted market prices for the product, both before and after processing, are available, they can be used for inter-branch billing, thereby fixing definitely the margin available to the processing establishment for costs and profit. Or the prices obtained by independent processing plants for the same work may be used, if the quantities involved are comparable.

130. In the absence of independent prices or rates, the amount earned by the processing branch must be computed from internal data. The amount to be credited to the processing branch should be the inward billing price plus a margin sufficient to cover the normal cost of conversion at the branch and an allowance for branch profit. The amount to be paid to the branch should be the amount which would justify the construction and operation of an independent processing plant to handle the same volume of business. An independent capitalist considering the construction of such a plant would want to know first what the volume of business would be and the amplitude of variations in demand. Large variations in the volume of goods to be processed at different periods would require the maintenance of a plant of sufficient capacity to handle the peak load, and this extra capacity would necessitate a larger allowance for overhead to cover the cost of idle time in seasons of low production. The variability in demand, in other words, would determine whether

the plant would normally operate at 60, 70, 80, or some other per cent of its rated capacity. Before constructing a processing plant an independent capitalist would require some assurance of a payment for services rendered sufficient to cover the direct costs of operation, the overhead computed on normal capacity, and a reasonable profit on his investment. Direct costs, of which direct labour is the best example, can usually be computed without difficulty. Overhead can be estimated with reasonable accuracy if the probable volume of business is known. The margin required for profit will depend on the volume of business handled and the risk involved. In determining a reasonable rate of return for the processing establishment, it would be wise to give some weight to the rate earned by the enterprise as a whole.

131. The required profit, as thus estimated, divided by the average annual production in units will give the necessary profit per unit, or if divided by the normal conversion cost for a year, it will give the necessary rate of profit expressed as a percentage of the processing cost. The profit per unit so determined when added to the processing cost per unit should give a reasonable price per unit for the service rendered. It would be difficult to fix independently both inward and outward billing prices for an intermediate processing establishment, but it is not so difficult to determine a margin or price for services rendered which will in normal times allocate a reasonable profit to the branch. Other methods, if desired, can be used. All accounts might be kept on a cost basis through the whole series of processes and the total profit on the goods processed, separately determined. This final net profit could then be apportioned between production and distribution, and the manufacturing profit thus determined could be allocated to the different processing establishments in proportion to the work done by each. Or inward and outward prices might be fixed by company executives on the basis of careful estimates. Unless the intermediate processing establishment is one of the major units of the enterprise, however, these more difficult methods should be avoided. In large complex enterprises it is both logical and convenient to allocate a profit to minor operating units measured by compensation for services rendered and to make the real centre of management the residual claimant for all remaining profit.

ASSEMBLY PLANTS.

132. Because of tariff regulations, transportation costs, or other considerations, large industrial enterprises have opened so-called assembly plants in many countries. These plants usually import a substantial proportion of finished parts, manufacture other parts themselves, and assemble the two classes of parts to produce a finished product, such as an automobile. The assembly plant may also have charge of sales in the country in which it is located and sometimes in neighbouring countries. The difficulty of working out an accounting system by which profits can be allocated to such branches on a reasonable and consistent basis should be at once apparent.

133. In the first place, it is clear that there can be no recognised market price for finished parts transferred to an assembly plant, and the commission basis obviously will not apply. There may be independent factory prices for finished parts, but parts sold to dealers for repair purposes are usually higher priced than parts used in an original assembly. The parts required for assembling an automobile, for example, sell separately for much more than the assembled car. Furthermore, the parts transferred may be only partly finished. A logical method of allocating profit to such branches would be, first, to separate the manufacturing profit from the selling profit and to assign the latter to the sales branch, whether at the assembly plant or elsewhere. The manufacturing profit should then be apportioned between the assembly plant and the foreign manufacturing division in proportion to the amount of work done by each. The relative amount of work done may be measured by ascertaining the proportion of the total conversion cost which was incurred at each plant, or the list prices of all parts handled may be added together and the proportion which the value of parts manufactured at each plant bears to the total value at list price may be used to

determine the relative amount of work performed. This method obviously cannot be used if partly finished parts are transferred. The use of such methods are not beyond the range of possibility, but a carefully designed system of cost accounting would be necessary. Such a system, naturally, would have to be worked out by the companies themselves. In the meanwhile, joint profits arising from partial manufacture in one country, and completion, assembly and sale in another will have to be apportioned on an expense or other convenient basis. The problem is one which requires a special study of the industries concerned. It cannot be solved in any general or theoretical way. If it is possible to establish the reasonable charge which an independent enterprise would make for performing services such as the assembly plant renders, this would seem a simple solution.

CHAPTER IX

CAPITALISED BASIS OF BRANCH ACCOUNTING.

134. If branch establishments are to be treated as separate business units for accounting and tax purposes, it is logical, though not absolutely necessary, that an adequate capital be formally assigned to each. This is sometimes done by the general management of business concerns as a means of placing upon branch managers a definite responsibility for earning enough profit to meet interest, dividend, and income-tax requirements on the capital invested at the different branches. If a definite capital is to be assigned to each branch, it should be fixed by an appropriate resolution of the board of directors. The branch capital structure, in other words, should be built up as carefully as that of a truly autonomous subsidiary company. The only essential difference between the two would be that the branch remains unincorporated. This method presupposes that the branch is treated as an independent entity separate from the enterprise, and therefore advances to it from the enterprise are considered as borrowed capital and not capital of the branch of the enterprise itself. The interest payable on such an advance would therefore constitute a deductible expense under the law of the country of the branch and would not be subject to the generally observed rule that a taxpayer may not deduct interest on its own capital. Because of this fiction it would be immaterial whether the funds advanced to the branch were entirely out of the capital of the enterprise or partly out of borrowed funds, and the interest charged to the branch on advances would be considered as income to the enterprise.

TREATMENT OF BRANCH AS SEPARATE ENTITY.

135. There is no formula by which the proper amount of branch capital can be exactly determined, but there are several tests which may be applied. A comparison with the figures of independent dealers in the same business should indicate roughly the amount of capital required, and a detailed analysis of branch operating data will show whether the branch needs more or less capital than the average independent. If branch income and expense are carefully budgeted, it may be possible to compute directly the amount of capital required. A simpler method, however, is to assign to each branch as permanent capital an amount which bears the same ratio to total branch assets as the total capital of the company bears to its total assets. This computation is possible only if the branch regularly carries cash balances sufficient for its needs and otherwise has the full complement of assets which an independent concern would need. Even so, the method is not strictly valid for branches engaged in different lines of activity. In the absence of data which indicate the specific capital requirements of a particular branch, however, it does give a reasonable approximation. When the amount of permanent branch capital has been determined, it should be set up on both branch and home office books. At the branch this may be done by debiting the

home office current account and crediting a branch capital account. At the home office the corresponding entry would be to debit a branch capital account and credit the branch current account.

136. After branch capital has been removed from the home office current account, any remaining credit balance is in the nature of an advance from the home office. A debit balance would ordinarily indicate a deficiency of branch capital, though it could indicate an advance to the home office. Advances to branches from the home office are of three types. Some advances consist simply of amounts currently due for merchandise or supplies. No interest should be charged by the home office on such items, if they are regularly settled by branch remittances within the thirty, sixty, or ninety day term for which commercial credit is usually extended. Or the advances to a branch may be temporary advances of current funds to take the place of bank loans. On these, interest may properly be charged at the rates currently applicable to bank loans. Finally, there may be permanent advances which are equivalent to the funded debt of independent concerns. Since trading concerns are seldom financed to any great extent by means of long-term borrowing, advances of this kind in the case of sales branches should be strictly limited. Interest on permanent advances of this character, where justified, should be figured at approximately the rate which applies to the funded debt of the company. Some companies which have a substantial amount of funded debt find it advantageous to apportion it among the branches in order that each branch manager may realise clearly his responsibility for earning the interest charges on the amount of debt which properly relates to his branch. This amount may be entered on the books of a branch by debiting the home office current account and crediting an account which may be called home office borrowed funds. A contra account should, of course, be opened on the home office books.

137. If this procedure of placing branches on a capitalised basis is fully carried out, the usual home office current account will be divided into at least two sections — namely, branch capital account and a true home office current account. Interest may be charged on that part of the current account which represents a real temporary advance which takes the place of a bank loan. A third section for borrowed funds or permanent advances may be introduced if the branch financial structure is of a type that would justify long-term financing in an independent concern. Such financing would not ordinarily be proper unless the branch investment in fixed assets is relatively heavy. The interest on advances from the home office will be debited to interest expense by the branch and credited to the home office current account, or remitted in cash. The home office will debit the branch current account or cash and credit interest charged to branches, or perhaps interest earned. The treatment of these intra-company interest charges for tax purposes will be discussed in the latter part of this chapter.

APPORTIONMENT OF INTEREST ON GENERAL INDEBTEDNESS.

138. If branches are not placed on a capitalised basis, interest paid on the general indebtedness of a concern may be apportioned among them. This represents a departure from the concept of a branch as a separate business unit, but it may, nevertheless, be used with satisfactory results. There are several different methods of apportionment, but only one will be presented here — namely, apportionment on the basis of net assets or net worth. Other methods, such as apportionment according to total assets or in proportion to funds used, are less definite and less satisfactory. The exact methods to be followed can be more clearly explained by the use of illustrative figures.

Trial Balances of Company X and Branches A and B.

	Branch A	Branch B	Home office	Consolidated
<i>Assets:</i>	\$	\$	\$	\$
Current assets.....	1,500,000	500,000	2,000,000	4,000,000
Investments.....	—	—	1,000,000(a)	1,000,000
Fixed assets.....	500,000(b)	1,500,000	3,000,000	5,000,000
Branch A current.....	—	—	1,700,000	—
Branch B current.....	—	—	800,000	—
	2,000,000	2,000,000	8,500,000	10,000,000
<i>Liabilities and Capital:</i>				
Current liabilities.....	300,000	200,000	500,000	1,000,000
Funded debt.....	—	1,000,000(c)	3,000,000(d)	4,000,000
Home office current.....	1,700,000	800,000	—	—
Net worth.....	—	—	5,000,000	5,000,000
	2,000,000	2,000,000	8,500,000	10,000,000
Interest actually paid.....	5,000	50,000	130,000	185,000

(a) The investments consist of the stocks and bonds of subsidiary and associated companies.

(b) Most of the real estate used by Branch A is rented on a long-term lease. The fixed assets shown consist largely of furniture, fixtures and equipment of various kinds.

(c) The million dollars of funded debt listed at Branch B consists of a 5 per cent first mortgage on the fixed assets of the branch.

(d) The three million dollars of funded debt carried at the home office consists of 4 per cent debenture bonds.

139. In order to make a satisfactory allocation of interest in accordance with net assets or net worth, it is necessary to adopt the following procedure :

(a) Allocate to each branch and set up on its books all indebtedness which relates directly to its own operation ;

(b) Charge each branch for all interest paid on such indebtedness.

(c) Apportion all remaining interest to branches (including the home office) in proportion to the net assets specifically assignable to each. The amount of net assets is equal to the total assets located at each branch minus the total liabilities specifically assigned to it, including the liabilities directly allocated in (a) above. Liabilities which are not specifically assignable should not be deducted from the assets of any branch. The general indebtedness to which the apportionable interest expense relates should not be included in making the apportionment.

140. In the X company illustration, \$5,000 of interest can be definitely allocated to branch A ; \$50,000 to branch B ; and \$38,000 to the home office. The \$38,000 of interest expense specifically allocated to the home office is made up of \$10,000 of interest on current indebtedness pertaining to the operations of this office, and \$28,000 of interest on the \$700,000 which was assumed to have been borrowed for the purpose of carrying the investments in subsidiary and associated companies. After making these specific allocations of interest to the different branches, \$92,000 of interest

expense remains to be apportioned. The method of making this apportionment and the results are shown in the table which follows :

	Net assets	Per cent	Interest apportioned	Interest directly allocated	Total interest
	\$		\$	\$	\$
Branch A.....	1,700,000	23	21,160	5,000	26,160
Branch B.....	800,000	11	10,120	50,000	60,120
Home office.....	4,800,000	66	60,720	38,000	98,720
	7,300,000	100	92,000	93,000	185,000

141. In the first column the net assets of each branch are shown. The total assets of branch A, as given in the balance-sheet of paragraph 138, amount to \$2,000,000. From this the \$300,000 of current liabilities are deducted, leaving \$1,700,000 as the net worth or net assets of branch A. The total assets of branch B are likewise \$2,000,000, but from this amount it is necessary to deduct not only the \$200,000 of current liabilities, but also \$1,000,000 of funded debt, leaving net assets of only \$800,000. The computation of the amount of net assets which belong to the home office is a little more difficult. In the first place, the amounts of \$1,700,000 and \$800,000 which represent the net investment in branches A and B respectively must be excluded. The \$6,000,000 remaining represents the value of assets pertaining to the operations of the home office. Before the net assets of the home office can be ascertained, the amount of indebtedness pertaining to its operation must be determined. It may be assumed that all of the current liabilities, amounting to \$500,000, are incurred by the home office for its benefit. As has already been stated, it is assumed that \$700,000 of the funded debt represents an amount borrowed to carry the investment in subsidiary and associate companies. This amount should be assigned to the home office, bringing the total amount of home office liabilities up to \$1,200,000. Subtracting this amount from the \$6,000,000 worth of assets leaves \$4,800,000 as the value of the net assets of the home office.

142. As shown in the table, the net assets of the three branches combined before deducting general indebtedness amount to \$7,300,000. The second column in the table shows the percentage which the net assets of each branch bear to the total net assets. These percentages, when applied to the \$92,000 of interest to be apportioned, give the amounts assignable to the different branches as shown in the third column. When these amounts are added to the interest directly allocated, as shown in the fourth column, we find the total amount of interest chargeable to each branch.

143. The entries required for placing the apportioned charge for interest on the books of the different branches are given below :

<i>Branch A's books:</i>		\$	\$
Interest expense		21,160	
Home office current			21,160
(Apportioned charge for interest on company indebtedness.)			
<i>Branch B's books:</i>			
Interest expense		10,120	
Home office current			10,120
(Apportioned charge for interest on company indebtedness.)			

<i>On the home office books:</i>	\$	\$
Branch A current	21,160	
Branch B current	10,120	
Interest expense (or interest charged to branches) (Interest apportioned to branches.)		31,280

144. The advantage of this method is that it reduces to a minimum the amount of interest which has to be apportioned, and obviously no general apportionment of interest among branches of an international enterprise can hope to be particularly accurate. In applying the proposed method, however, some difficulties may be met in making the direct allocation of liabilities and corresponding interest charges to branches. In general, the obligations assigned to branches should be limited to local branch indebtedness and to mortgages on branch property. The fact that all or part of the proceeds of a bond issue were used to finance a branch does not necessarily indicate that the bond issue and the interest thereon relate specifically to the branch in question. The exact manner in which the funds are used may be largely accidental. A bond issue, for instance, may serve simply to replace current funds which have been temporarily diverted to the construction of additional plant facilities.

TAX ASPECTS OF INTRA-COMPANY INTEREST.

145. It has been shown that intra-company interest charges may arise in either of two ways, though not properly by both :

- (1) By placing branches on a capitalised basis and charging interest on advances from one branch to another ; or
- (2) By the allocation or apportionment of interest expense actually paid by a company.

146. The treatment of intra-company charges of either type will depend upon the general rule adopted for the taxation of interest. Interest may be taxed either in the country of origin or at the domicile of the recipient, and the significance of intra-company interest charges under the two methods is quite different. It will be assumed first that interest is to be taxed in the country of origin.

147. Interest paid by a branch on advances from another branch, usually the home office, clearly originates in the country in which the branch making payment is located. The making of such a charge indicates that the branch is to be treated as a separate business unit, and under similar conditions there would be no doubt as to the place of origin of interest paid by an independent concern to a foreign creditor. The country of origin may tax such interest either by refusing to allow it as a deductible expense in computing the net taxable income of the branch, or it may levy a tax on the home office (or other branch) as the recipient of the income. The former method would be simpler and entirely proper unless interest income and business profits are taxed by different methods or at different rates.

148. Interest of the second class — *i.e.*, interest expense apportioned to a branch — also has its origin in the country of location of the branch against which the charge is made. The only justification for making an apportioned charge of this kind is the assumption that the branch in question is using the borrowed funds to which the interest relates. If the funds are actually used by the branch, it is clear that the interest originates there. Apportioned interest should therefore be treated exactly like interest on advances. It should, in other words, either be disallowed as a deductible expense on the branch return, or taxed as income of the home office originating in the

country in which the branch is located. In view of these facts, it is apparent that, under a system of origin taxation, there is little need for making an apportionment of interest to branches. Such an apportionment would ordinarily have little, if any, effect on the amount of tax payable at the branch. A different situation exists, however, if interest is taxable at the domicile of the recipient.

149. If profit is to be taxed in the country of origin and interest at the domicile of the recipient, it is obvious that the two forms of income must be kept separate. The problem as it usually arises is to prevent the diversion of profits from the country of origin to some other country in the guise of interest. If no limitations were placed on intra-company interest charges, it might be possible for a company to escape all income taxation in the countries in which it had branches by the simple expedient of making excessive charges for interest. The country of domicile, on the other hand, might properly object if the home office made no interest charges whatever against its foreign branches.

150. Under the rule of taxing interest at the domicile of the recipient one further question arises with respect to intra-company interest. Methods have been suggested by which the amount of intra-company interest may be computed, but must these charges be made? In particular, must interest be apportioned to a branch or charged on branch advances even though the branch suffers a loss or fails to earn the full amount of interest? If branches are regarded as independents, the logical answer is yes, but these are questions of fiscal policy which are not within the scope of this report.

CHAPTER X

BRANCH TAX RETURNS AND SUPPORTING SCHEDULES.

151. Since legal requirements and tax procedures in different countries are so highly varied, no single form of tax return could be suitable for all. The logical procedure would be to require each branch to fill out a regular tax return on the basis of its own accounts just as an independent concern would do, and to furnish such supplementary schedules as are requested to support and explain certain amounts, which are not the result of *bona fide* transactions at arm's length. While taxpayers may well be required to submit some supplementary information supporting each branch tax return, the routine requirement of non-essential schedules should be avoided in the interest of simplicity and economy. Schedules at best are less satisfactory than a direct examination of branch accounts and records, and they should therefore be required only when a direct examination is impossible or when the desired information is not available at the branch.

152. Except for intra-company transactions and relationships, the accounts of a branch are on exactly the same basis as the accounts of an independent concern. The first step, therefore, in testing the reasonableness of the separate accounts of a branch should be to obtain a summary of intra-company transactions. This information would be provided by a schedule reconciling the balance of the current account between the branch and the home office at the beginning of the fiscal year with the balance at the end. If more than one current account is used, the balance of all must be reconciled. The required schedule might appear in a form somewhat as follows :

SCHEDULE I.

*Analysis of the Intra-company Transactions of Branch . . . with the Home Office and/or Other
Branches of the . . . Company during the Fiscal Year ending . . .*

A. Home office current account :

Balance at end of fiscal year	xxx
Balance at beginning of fiscal year	xxx
Increase (or decrease)	xx

(For the purpose of this schedule, all intra-company transactions between this branch and any other branch or branches of the company are assumed to be cleared through the home office current account. If separate accounts for different branches are kept, they must be combined and explained by a supplementary schedule.)

Intra-company charges from other branches :

B. To branch balance-sheet accounts :

(1) Cash remittances to branch	xx
(2) Branch liabilities paid by home office	xx

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(3) Fixed assets provided or paid for by home office	xx
(4) Branch net profit for period	xx
(5) Other charges	xx

C. To branch profit-and-loss accounts :

(1) Merchandise received from home office or other branch	xx
(2) Supplies received from home office or other branch	xx
(3) Direct services rendered by home office or other branch	xx
(4) Branch expenses paid by home office	xx
(5) Apportioned charges	xx
(6) Interest on advances from other branches	xx
(7) Other charges	xx
Total charges from other branches	xxx

Intra-company credits (charges to other branches) :

D. To branch balance-sheet accounts :

(1) Remittances to home office or other branches	xx
(2) Home office liabilities paid by branch	xx
(3) Branch net loss for period	xx
(4) Fixed assets transferred to other branches	xx
(5) Other credits	xx

E. To branch profit-and-loss accounts :

(1) Merchandise shipped to home office or other branch	xx
(2) Commissions earned	xx
(3) Supplies furnished (or returned)	xx
(4) Direct services rendered to home office or other branch	xx
(5) Interest on advances to other branches	xx
(6) Other credits	xx
Total charges to other branches	xxx

Excess of charges from other branches (must equal increase in home office current)	} xx
Or excess of charges to other branches (must equal decrease in home office current)	

F. Were there any transactions between this branch and any company which has been affiliated with or subsidiary to the during all or part of the fiscal year covered by this return other than the transactions summarised in parts B, C, D, and E of this schedule ?

(If the answer is yes, Schedule I-F must be prepared in a form similar to Schedule I to explain all such transactions.)

153. The intra-company transactions which involve charges or credits to branch balance sheet accounts ordinarily cause little difficulty. Cash remittances to or from the branch, items B(1) and D(1) of Schedule I, are perfectly definite transactions into which the question of valuation does not enter except in a minor way with respect to the conversion from one currency to another.

The payment of direct branch liabilities by the home office and the payment of home office liabilities by the branch, items B(2) and D(2), are practically equivalent to cash remittances. The entries for the net profit or loss of the branch, items B(4) and D(3), will, of course, be supported by the branch profit-and-loss statement which will constitute the body of the return. Any difference between the profit shown by the books and the taxable income should be explained.

154. If charges to fixed asset accounts resulting from intra-company transactions, item B(3), are relatively large, they should be analysed with some care, because they will form the basis for future depreciation charges and will therefore enter into the determination of taxable income. A supplementary schedule could on occasion be required as a means of obtaining a detailed analysis of intra-company charges to fixed assets.

155. Since intra-company charges and credits to branch profit-and-loss accounts have an immediate effect on taxable income, complete information regarding such items should be available at the branch. The most important of these usually are the charges for goods received from the home office or other branch. If independently determined prices are available, a statement to the effect that current market prices are used in billing all inter-branch shipments should be sufficient, provided facilities are available by which the tax authorities may compare prices recorded on the books with quoted market prices. Tax authorities would, of course, be justified in asking for any information which would aid in making this comparison. If an independent factory price is used instead of quoted market prices, evidence should be available to show that the independent factory price actually is paid by dealers, and that these dealers handle enough of the product to make the price a representative one, or that such price is otherwise reasonably established.

156. In Chapter VII a method was presented by which joint profits on goods manufactured in one country and sold in another could be apportioned. Such an apportionment requires a careful analysis of production and distribution costs incurred in both countries and is therefore rather complicated. An enterprise which allocates profit on this basis, however, might present schedules showing :

- (1) The final selling price of goods manufactured in whole or in part in one country and sold in another ;
- (2) The cost of materials used in producing them ;
- (3) The total costs other than material costs applicable to the goods at both the producing and the distributing branch — in other words, conversion costs and distribution costs incurred at each branch with respect to the goods in question ;
- (4) The ratio of the conversion and distribution costs (not including material costs) incurred by the reporting branch to the total conversion and distribution costs applicable to the goods ; and
- (5) The total net profit on the goods and the amount applicable to the reporting branch on the basis of the above ratio.

157. Schedules of this kind, it should be noted, cannot be required from all taxpayers. The necessary information would be regularly available only in companies which have the most complete cost systems, and even then some of the results might be open to question. On occasion the method may, however, be profitably used in testing the reasonableness of an inter-branch billing price or an allocation of profit which is in dispute. This method of apportionment is by no means offered as an ideal or ultimate test, but it is a reasonable one and may serve where more convenient criteria are not available.

158. It must be recognised, however, that, no matter what schedules may be required, tax officials cannot hope to make a direct verification of foreign items of income and expense. Since

direct verification is not feasible, it would seem that the possibility of independent verification by public accountants ought to be considered. While the profession of accounting is not highly developed in certain countries, in others it has achieved the status of a true profession with a strict code of ethics. Although it would not be feasible to require the certification of all returns, there would seem to be no reason why concerns whose books are regularly audited should not submit a certificate from the auditors in support of their tax returns. Such a certificate from a reputable firm of accountants, though not a guarantee, could be accepted as a good indication that the intra-company accounts were not unduly biased or distorted. If auditors' certificates are to be used effectively for this purpose, however, a plan should be worked out by tax authorities and practising accountants in co-operation. It is essential that the responsibility of the accountant to his client and to the tax authorities should be clearly understood by all parties.

Appendix A.

METHODS OF ACCOUNTING FOR EXCHANGE OPERATIONS.

1. It would be difficult to ascertain what methods of conversion are most commonly used by international enterprises. It is safe to say, however, that the methods are varied, and that some of them are designed to eliminate book-keeping detail rather than to produce an accurate figure for the gain or loss on exchange. By keeping reciprocal accounts on the home office books or by other methods,¹ the necessity for converting some or even all of the items on branch trial balances may be avoided. Accounting texts² usually state, however, that the accounts appearing in branch trial balances should be converted somewhat as follows :

Fixed assets and related reserves at the rate on the dates of acquisition.

Current assets and current liabilities at the current rate of exchange on the balance-sheet date.

Income and expense accounts at an average rate for the period.

Remittances at the rates actually paid.

Current account by substituting the balance shown on the home office books.

2. Since many factors are involved in the determination of exchange losses and gains, a consideration of underlying assumptions is essential before any intelligent analysis of the problem can be made. In determining the income assignable to the home office of an enterprise for tax purposes either of two methods may be used. The total income of the enterprise may be determined by consolidating the figures for all branches throughout the world, and the income assignable to the home office may then be obtained by deducting from this total the amount of income allocable to foreign branches. Or the income of the home office may be determined on the assumption that it is simply another branch whose income is to be computed on the basis of its own accounts as a separate business unit. This assumption implies that the relationships between the home office and other branches are to be essentially the same as the relationships between a parent company and its wholly owned subsidiaries. The results shown by the two methods are likely to be quite different, and the choice of method therefore constitutes an important question of policy. Accounting methods for determining exchange losses and gains under either method are available, but if the utmost confusion is to be avoided it is essential that one or the other be definitely adopted.

3. Business concerns generally seem to proceed on the first assumption — namely, that the profits of foreign branches are to be determined on the basis of their own separate accounts and that all remaining income is to be taken up by the home office. The effect of this procedure is to assign to the home office all exchange losses and gains arising out of the conversion of branch trial balances. From the point of view of the enterprise as a whole, this result is entirely fair. Since exchange

¹ RUMSEY, F., "Exchange Differences — A Method of avoiding them in the Books and Final Accounts", *Accountant*, January 30th, 1932, pages 137 to 147.

² KESTER, Roy B., "Accounting Theory and Practice", Ronald Press Co., New York, 1925, Vol. II, pages 507 to 520.

FINNEY, H. A., "Principles of Accounting", Prentice-Hall, New York, 1928, Ch. 56.

gains and losses can be ultimately realised only on actual remittances, they are properly assignable to the home office. The transfer of funds, in other words, is a home office function. The method here outlined for determining home office income and losses and gains on exchange is the one most commonly followed in accounting practice. It is also the method implied by the income-tax law of the United States, which purports to tax the total income of American enterprises but allows a credit for taxes paid on income earned abroad. In view of all these facts, it is probable that foreign exchange gains and losses on inter-branch transactions may be most conveniently handled by assigning them to the home office. This is desirable particularly if the home office hedges its commitments abroad.

4. The conversion of branch cash balances, accounts and notes receivable, and current liabilities at the current rate is unquestionably proper, and the resulting gains or losses are so definite that no special difficulties usually appear. The proper method for converting inventories, however, is not so obvious. Fluctuations in exchange rates may or may not cause compensatory changes in the market value of goods appearing in an inventory, and it is therefore difficult to find a suitable conversion rate. Since conversion at the current rate may sometimes cause a distortion of profit, it is recommended that foreign branch inventories be valued on the consolidated statements of an enterprise at cost or market, whichever is lower in terms of the currency of the home country. It may be assumed, for example, that goods appearing in the inventory of the London branch of an American enterprise cost \$4,850 and were recorded on the branch books at a value of £1,000. Converting this amount at a current rate which may be assumed to be \$3.50 would give a value of \$3,500 and show a loss of \$1,350. It is possible, however, that the fall in the value of the pound might have caused the market value of the merchandise in London to rise to £1,200, in which event this amount should be converted at \$3.50. As a result the loss on exchange would be reduced from \$1,350 to \$650 ($\$4,850 - 1,200 \times \$3.50 = \$650$) and the inventory would appear at market, \$4,200, which is lower than cost. If market were higher than cost, the goods would ordinarily be carried on the consolidated statements at their original cost, \$4,850.

5. Another difficult problem arises in connection with the conversion of fixed asset and related depreciation accounts. The situation may be most easily explained by the use of illustrative figures. Suppose an American company invested £10,000 in machinery and equipment for its London branch when sterling exchange was at \$4.85. The investment expressed in dollars would then be \$48,500, and, if depreciation be figured at 10 per cent, the annual charge would be \$4,850 or £1,000. Suppose, however, that sterling exchange falls to \$3.50 and remains at approximately that level. The annual depreciation will still be recorded at £1,000 by the branch, but when converted into dollars the amount will be only \$3,500. The difference between this \$3,500 and the \$4,850 decline in the value of the machinery and equipment appears as an exchange loss of \$1,350. In other words, one-tenth of the useful life of the machinery has been consumed and only \$3,500 of the original cost in dollars has been recovered. Since the branch has already borne the full charge for depreciation stated in pounds sterling, it is clear that the \$1,350 exchange adjustment, if recognised at all, must appear as a loss of the home office. It may be argued that this is merely a book loss which has not been realised and which cannot be realised until the funds recovered from the consumption in use or from the sale of the fixed assets are actually remitted. Exchange fluctuations, moreover, may be regarded as temporary and likely to be compensated for by later changes in an opposite direction. Although there is some force in these arguments, it should be noted (1) that a company which fails to recover funds equal in purchasing power to the original cost of assets currently consumed suffers a real economic loss whether it be recognised for tax purposes or not; (2) that it is practically impossible to determine when the recovered costs of fixed assets are remitted; and (3) there is no assurance that exchange gains and losses will balance over a period of years, and, even if they do, the essential difficulty still remains, since taxes are paid on the profits of separate years and not on the total profit of a number of years.

6. The problem which arises in connection with the conversion of fixed assets, depreciation reserves, and annual depreciation charges is sometimes solved in practice by the following procedure. At the date of acquisition, fixed assets are recorded on the branch books at their cost in the currency of the country in which the branch is located and on the home office books in the currency of the home country. Thereafter, depreciation is computed and recorded independently on the two sets of books, and no attempt to reconcile the annual charges or the carrying values in the different currencies is made. When the assets are sold or scrapped, the gain or loss to the branch is determined on the basis of its accounts according to the rules applicable to independent concerns. Thus, branch depreciation allowances and gain or loss on sales of fixed assets are correct from the point of view of the country in which the branch is located. The proceeds arising from the sale of the fixed assets are then converted into the currency of the home country at the prevailing rate and the gain or loss taken up on the basis of the home office accounts. As a result of this procedure it would be entirely possible for a gain to be shown in one country and a loss in the other on the same transaction ; but both tax administrations should be satisfied, since the books of both home office and branch are kept according to the rules and regulations of their respective countries. This method, it should be noted, is equivalent to converting assets and expenses in the customary way¹ and assigning the gain or loss on exchange to the home office. Under one method the gain or loss on exchange appears as a separate item, under the other it is concealed in the general profit-and-loss account. If losses and gains on exchange are to be recognised as deductions from or additions to the taxable income of the home office of an enterprise, the practical method of computing depreciation independently in the two currencies may be the most convenient method to follow.

7. All of the methods of conversion discussed above rest on the assumption that profit is to be determined from the point of view of the whole enterprise. The income attributable to the home office, in other words, is the income of the whole enterprise, as shown by the consolidated statements less the income allocable to foreign branches. It would be equally plausible to determine home office profit on an entirely different basis. It might be assumed that the home office is a branch dealing with other autonomous branches of the enterprise as if they were separate business entities. This, in fact, is the basic assumption of separate accounting. Viewed in this light, foreign exchange losses and gains on inter-branch transactions are determinable by quite different methods.

8. In order to determine such exchange losses and gains directly as they would be determined between independent concerns, it is necessary that a clear distinction be maintained between the permanent capital of a branch and its current debt to the home office. The permanent capital, as indicated by an appropriate resolution of the board of directors, should be recorded as branch capital on the branch books and as an investment in the branch on the home office books. The investment account on the home office books would thus be closely comparable to an account showing the investment in the stock of a wholly owned subsidiary company.

9. In allocating exchange losses and gains on current transactions between a branch and the home office by this method, it is essential that there be a clear indication of the basis on which payment is to be made. An enterprise might reasonably adopt any one of five or six different rules for the settlement of inter-branch charges. It might require :

- (1) That all inter-branch indebtedness be settled in the currency of the home office ;
- (2) That all such indebtedness be settled in the currency of the branch ;
- (3) That all inter-branch charges be settled in the currency of the branch making the charge ;

¹ That is, fixed assets and related reserves at the rates effective on the dates of acquisition and expenses at an average rate for the period.

- (4) That all such charges be settled in the currency of the branch against which the charge is made ; or
- (5) That all inter-branch charges be settled according to the provisions of a general plan prescribing specific methods for handling different types of transactions.

A sixth method, and it seems to be the typical one, would be to make no rule at all. Settlement of all inter-branch indebtedness in terms of the currency of the home office would assign all current exchange losses and gains to the foreign branches. This would have the advantage of reducing or increasing branch profits to the amount which the home office might reasonably expect to receive if the profits were currently remitted. It is doubtful, however, whether the countries in which branches are located would recognise losses of this character, and it seems rather artificial to assign to branches losses or gains which in any event must ultimately belong to the home office. The second rule requiring settlement in the currency of the branch would, of course, assign current losses and gains on exchange to the home office. This result is desirable for two reasons. It is so clearly a function of the real centre of management to direct the transfer of funds from one country to another that it seems logical to allocate exchange losses and gains in accordance with this responsibility. Moreover, if an enterprise follows the policy of hedging its foreign exchange commitments, the hedging operations are likely to be conducted by the home office, and it is desirable that losses and gains on the actual transactions should appear there also. Under rules three and four, the responsibility for losses and gains is divided between the branches and the home office. Method three might be convenient, but method four is not recommended, because of the confusion which might result if each branch were compelled to do its billing in three or four currencies. Rule five is the most flexible and therefore offers the best opportunity for adapting a system of foreign exchange accounting to the needs of each particular business. Under this rule an arrangement could be made whereby the branch would assume the risk of exchange fluctuations in connection with merchandise transfers — for example, while the home office would assume the risks on financial transactions such as the remittance of profits, interest, and the like ; or the opposite arrangement could be made. Although flexibility is highly desirable, it is doubtful whether the benefits in this instance would outweigh the tax difficulties which would arise if each enterprise had a different plan for allocating exchange losses and gains. It would seem more reasonable to adopt a uniform rule such as number two and to permit occasional exceptions where conditions warrant. Irrespective of the currency in which inter-branch charges are originally billed, it would seem to be desirable to have all settlements made on the basis of the branch accounts — that is, at the current rate of exchange at the date of the bill rather than the rate on the date of settlement. In other words, as a general rule, exchange losses and gains should be assigned to the home office.

10. Under the theory that the home office and the foreign branches are autonomous business units dealing with one another as with independent concerns, the gain or loss on exchange shown by the conversion of branch trial balances does not logically enter at all into the determination of home office income. There is, in fact, no need for making these conversions in computing profits earned by the branches or by the home office. Exchange differences, in other words, enter into the profit-and-loss account only when they occur in connection with actual remittances. Losses or gains arising from the conversion of depreciation charges and fixed asset accounts at different rates would not appear at all.

11. Exchange losses and gains on transactions affecting the permanent capital accounts of autonomous branches may be determined by the following procedure. The branch capital account, and conversely the investment account carried at the home office, would ordinarily contain the following items :

Additions :

- (1) The original investment in the branch ;

- (2) All additional investments subsequently made by the home office ;
- (3) The amount of branch profit not currently remitted.

Deductions :

- (4) The amount of capital returned to the home office ; and
- (5) Branch losses.

12. Remittances to or from the branch would properly be recorded on the two sets of books at the amounts actually received or paid in the respective currencies. Reinvested profits and branch losses would be recorded at the rates then current. The exchange gain or loss on a remittance of capital from the branch to the home office might be computed in either of two ways. Branch remittances (other than those on current account already discussed) might be treated as, first, a transfer of profits in the reverse order in which they were earned, and, second, after all profits have been transferred, as a return of capital to the home office in the reverse of the order in which it was invested. The use of this method would be facilitated if the branch were to keep an undivided profits account as well as a capital account. The exchange gain or loss could then be readily determined by comparing the proceeds of the branch remittance with the amount at which the profit or the investment covered by the remittance was originally recorded on the home office books. A simpler method would be to convert the remittance at a rate obtained by dividing the investment account at the home office by the branch capital account and to compare the result with the actual proceeds of the remittance. The methods here suggested are not as complicated as this condensed description of them might indicate. In effect, they treat branches practically as wholly owned subsidiaries. No loss or gain on exchange is shown unless actual remittances are made.

13. To summarise, two general methods for the determination and allocation of exchange losses and gains have been outlined :

- (1) Determining these losses and gains by converting and consolidating branch trial balances, and assigning the entire gain or loss to the home office ; or,
- (2) Treating each branch practically as a wholly owned subsidiary and recording exchange differences only on actual remittances either on current or on capital account.

14. Making a choice between these methods is not easy. The latter is more in harmony with the fundamental concept of separate accounting, and it prevents the recognition of gains or losses not actually realised. It is based on accounting methods, however, which are not generally used. The first method, on the other hand, is regularly used by business enterprises in their own accounting, and it produces reasonable results. In view of these conditions it is suggested that the first method be accepted for the majority of taxpayers, but that the second method, if consistently followed, be recognised in the case of enterprises which have placed their branches on a capitalised basis and which keep accounts from which exchange losses or gains can be directly determined. Under either method, it is recommended that exchange losses and gains be generally allocated to the home office.

Appendix B.

ILLUSTRATIVE ENTRIES FOR CONSIGNMENTS TO BRANCHES.

1. A sales branch operating on the consignment basis may receive its remuneration ¹ in the form of either a commission on sales or a profit. Under the former method of remuneration, branch profit is determined by fixing commission rates; under the latter, by fixing inter-branch billing prices. In many respects the fixing of commission rates is simpler than the fixing of prices. Commission rates are relatively stable though prices fluctuate widely. The reasonableness of commission rates, moreover, may be more readily tested by comparative data available within the country in which a branch is located without enquiring into foreign costs or profits. For these and other reasons the use of the commission basis of remuneration has been recommended.

THE COMMISSION BASIS.

2. Although no one series of entries would be suitable for all cases, some entries are given below to illustrate one method of recording transactions with a branch operating on a commission basis. These entries should be regarded merely as illustrations and not as models to be uniformly followed.

3. (1) Entries for the transfer of merchandise from home office to a branch :

(a) On the home office books :

Consigned goods : branch X (at cost)	xx
Inventory of finished goods	xx

This entry shows that the goods are now located at branch X, but it does not involve the taking up of any profit on the books of the manufacturing division.

(b) On the branch books :

A record showing the quantities and kinds of goods received is sufficient. No formal entry is necessary, but, if desired, one could be made as follows :

Inventory of consigned goods	xx
Consignments from home office	xx

The value used in this entry would almost of necessity be the anticipated selling price, since there would be no inter-branch billing price and the branch would not know production costs.

4. Under a commission plan, Customs duties and transportation charges paid by a branch would ordinarily be chargeable to the home office, since the latter is presumed to retain the ownership of the goods. The payment of such charges by the branch would be recorded as follows :

Home office current	xx
Cash	xx

¹ Paragraph 48 *supra*.

5. No entry would appear on the home office books until the account sales is received.

6. (2) Entries for branch sales and collections :

(a) On home office books : no entries ;

(b) On branch books :

As sales are made they might be recorded as follows :

Accounts receivable.	xx	
Home office current		xx
Commissions earned.		xx

Other entries are, of course, permissible.

Collections would be recorded in the regular way :

Cash.	xx	
Accounts receivable		xx

7. (3) Entries for the account sales or report from branch to home office :

(a) On the home office books :

Periodically the home office would receive a report from the branch showing merchandise received, sales made, merchandise on hand, expenses paid, commissions earned, and other information relative to the consignment business of the branch. From such a report the following entry might be made :

Branch X current (for the net amount due on goods sold).	xx	
Branch commissions and expense (for commission at the agreed rate, and for expenses incurred by the branch for the benefit of the home office)		xx
Consigned goods : branch X (for Customs duties and transportation charges paid by the branch on consigned goods)		xx
Branch sales (for the full amount realised by the branch).		xx

8. By means of this entry a complete record of the income and expense relating specifically to goods sold by branch X is placed on the home office books. The purpose of the debit to " consigned goods : branch X " is to raise the carrying value of the inventory to the full delivered cost. The failure to include transportation charges and Customs duties in the inventory value of unsold goods would result in charging too much expense to the current period and too little to the following period.

9. If a cash remittance accompanies the account sales, an entry would be made in the regular way, debiting cash and crediting the branch current account.

10. (b) On branch books :

The rendering of an account sales will necessitate no entry on the branch books unless the proceeds are remitted, or unless a memorandum entry were made in the accounts when the consigned goods were received. A remittance would, of course, be recorded as,

Home office current	xx	
Cash.		xx

11. If a memorandum entry were made to show the receipt of the goods, it would now have to be reversed with respect to the goods sold in order to reduce the inventory of consigned goods to the amount actually on hand.

Consignments from home office	xx	
Inventory of consigned goods.		xx
(To remove from the consignment accounts the book value of goods sold for the account of the home office.)		

12. (4) Entries for profit realised by home office and branch on the sale of consigned goods.

(a) On home office books :

Cost of branch sales	xx	
Consigned goods : branch X.		xx
(To transfer from the inventory account the full, delivered cost of consigned goods sold by branch X. This cost includes Customs duties, transportation charges, etc.)		

13. At the end of a year the accounts relating to the consignment business might be closed as follows :

Branch sales	xx	
Cost of branch sales		xx
Branch commissions and expense		xx
Profit and loss		xx

14. The amount of profit thus shown on the home office books would in reality be a gross manufacturing profit — *i.e.*, the net proceeds of sales effected by branches less the cost of the goods sold. If the branch commission rate is comparable to the rates of gross profit currently prevailing in similar businesses, this profit should not differ greatly from the profit which would have been earned on sales in the same volume to independent dealers.

15. (b) On branch books :

An entry in the following form would record the profit of the branch :

Commissions earned.	xx	
Expenses (in detail)		xx
Profit and loss		xx

16. It should be noted that the problem of inventory valuation does not enter into the determination of branch profit. Losses or gains due to price fluctuations are assigned to the home office.

THE CONSIGNMENT BASIS WITHOUT COMMISSIONS.

17. Goods may be handled by sales branches on a consignment basis, even though branch remuneration takes the form of a profit on sales rather than a commission. Under this plan, inter-branch billing prices must be determined by the methods used for arriving at proper billing prices to branches which " buy " the product from the home office or other branch. Consignments handled on this basis as a matter of fact are the same as outright purchases, except that no manufacturing profit is taken up until the goods are actually sold to outside concerns, and that title to branch inventories is vested directly in the home office which is presumed to be the consignor. Entries for consignments handled in this manner are somewhat different from the entries given above for the commission basis. The entries on the two sets of books might appear as follows :

(a) On the home office books :

Consigned goods : branch X (at cost)	xx	
Inventory of finished goods		xx
(Goods consigned to branch X.)		
Branch X current	xx	
Sales to branches		xx
(To charge branch X at the agreed inter-branch price for goods sold by it.)		
Cost of sales to branches	xx	
Consigned goods : branch X.		xx
(To transfer the cost of goods sold from the inventory of consigned goods.)		
Cash	xx	
Branch X current		xx
(Remittance from branch.)		

18. A comparison of sales to branches with the corresponding cost of sales will show the gross profit realised by the home office on the goods sold by branches.

(b) On branch books :

Inventory of consigned goods (at inter-branch billing price)	xx	
Consignments from home office		xx
(Consigned goods received from home office.)		
Inventory of consigned goods	xx	
Cash		xx
(Customs duties and transportation charges on consigned goods. Assuming that these are to be borne by the branch. If the inter-branch price is the delivered price, these costs should be charged to the home office as they were in the entries for the commission basis.)		
Accounts receivable or cash	xx	
Sales (consigned goods)		xx
(Sales by the branch to customers.)		
Cost of (consignment) sales	xx	
Inventory of consigned goods		xx
(To transfer from the inventory account the inter-branch billing price of goods sold plus Customs duties, transportation charges, etc.)		
Consignments from home office	xx	
Home office current		xx
(To set up the liability to the home office for the inter-branch billing price of goods sold.)		

19. These entries, as would be expected, are quite similar to the entries which would be made if transfers of merchandise to branches were to be treated as sales rather than consignments. The profit of the home office, however, would differ unless unrealised profit in branch inventories were eliminated. If this elimination is made, the method of recording inter-branch transfers as purchases of one branch and sales of the other will produce practically the same profits as the consignment method.

Appendix C.

ANALYSIS OF PRODUCTION AND DISTRIBUTION COSTS.

DIRECT MATERIAL COSTS.

1. Direct material consists of all material which appears in the finished product in commercially measurable quantities. It includes raw materials, such as crude rubber or iron ore ; semi-finished materials, such as pig-iron ; finished parts, such as carburettors or rubber tyres used in the manufacture of automobiles, or, in short, everything which goes into the finished product of a particular company but which is not manufactured in its own plants. Direct material does not include factory supplies which do not appear in the finished product. Direct material costs include the invoice price of materials purchased, plus Customs duties and transportation charges to the factory. Sometimes a handling charge is also included, but this is not altogether logical. Since the handling of materials within a plant is a necessary part of the process of conversion, such charges should be classed as conversion costs. The distribution of direct material costs to the units of product manufactured usually involves little difficulty. To find the cost of material in a given article, it is necessary simply to measure the quantity required in manufacturing it and to multiply this amount by the delivered cost of the material. Special problems arise in the case of joint products and by-products, but these are too technical for consideration here. Cost accounting methods have been developed which provide for a reasonable allocation of material costs in such cases.

CONVERSION COSTS.

2. The cost of conversion includes two principal elements ; direct labour and factory overhead expense. Direct labour is labour expended directly on the product itself and is distinguished from other labour which is necessary in the operation of a plant but which does not apply to specific units of product. The cost of direct labour for any unit of product may usually be determined easily by the use of time records which show the time spent by each worker on each article or on each order.

3. Factory overhead expenses cannot be allocated with such precision, since by definition this group includes only those costs of factory operation which do not relate to specific units of product. Typical factory overhead expenses are superintendence, indirect labour (janitors, watchmen, etc.), supplies, heat, light and power, insurance, property taxes, depreciation, repairs and maintenance, and a share of the general administrative expense of the organisation. The allocation of these expenses to the different factory departments and finally to the product itself constitutes the most difficult problem of cost accounting. For a more detailed presentation of these methods, the reader is referred to standard works on cost accounting. For present purposes, it is sufficient to note that cost accounting methods have been developed whereby any manufacturing concern which wishes to do so may make a reasonably accurate computation of the unit cost of its product. In the United States, at least, considerable progress has been made toward the determination of standard costs designed to show what an article ought to cost. These standards

are carefully set by means of time and motion studies and the like, and are used as a means of discovering inefficiencies and unfavourable variations in actual costs. This refinement in method indicates that factory cost accounting has reached a high stage of development in some companies and can be depended upon, if properly used, to supply reliable cost data.

4. One characteristic of factory overhead expenses must, however, be considered here. Most of these expenses are rather fixed in character — that is, they do not vary in proportion to changes in the volume of production. Superintendence, depreciation, insurance, property taxes and certain other expenses are likely to remain almost constant, even though the volume of production is materially decreased. As a result, in periods of slack production the overhead cost per unit of product will be exceptionally high ; or, to say the same thing in different words, a substantial amount of unabsorbed overhead will remain. This unabsorbed overhead — *i.e.*, the overhead not applied to product — represents the cost of idle plant capacity. If the entire overhead for a given period were applied to the product actually manufactured during that period, the effect would be to add the costs of abnormal idle capacity to the normal costs of production, thereby causing a marked increase in unit costs at the very time when business activity is low and when sales prices are likely to be falling. If all of the overhead is not absorbed in this manner, however, the losses from abnormal idle capacity must themselves be allocated to some division or divisions of the enterprise. Since it is customary in many industries to charge only normal or average overhead costs to the units of product manufactured, we shall proceed on the assumption that this method is to be followed.

5. The disposition of the abnormal idle capacity losses which appear under this method will depend on which of two conflicting theories is adopted. It may be argued that these losses are due to the failure of the sales department to sell in sufficient volume and that they should be charged against the several sales branches. This theory logically requires that sales budgets be prepared showing how much each branch would have to sell in order to obtain the necessary total volume, and that the costs of abnormal idle capacity be prorated among them according to the differences between the actual sales and the budgeted sales of each branch. This method, however, would always load the heaviest losses upon the branches least able to bear them. The allocation of abnormal idle capacity costs in accordance with actual sales volume would meet this difficulty, but it would be practically equivalent to adding these costs to the unit cost of production.

6. The other theory with respect to abnormal idle capacity costs is that they are due to the over-expansion of plant and are the measure of the loss due to the adoption of this policy. Since major questions of policy of this kind must be decided by the general management, even though they may be influenced by an over-optimistic sales department, it might appear that these losses should be charged against the real centre of management of a company. Two policies are usually open to a concern. It may elect to manufacture the product which it sells or to purchase it from others. Or it may manufacture part and purchase part. Since losses from abnormal idle plant capacity could not appear if the product were purchased from others, it seems logical to conclude that such losses, when they do appear, must be ascribed to the policy of manufacturing in the company's own plants. This would be true even though the real centre of management were at the headquarters of the sales division and the manufacturing plant located elsewhere. In order to determine the net advantage or disadvantage resulting from the decision to manufacture in its own plants, a company would have to assign idle capacity costs to the manufacturing function, and it will be assumed that this is the proper procedure to follow in allocating profits for tax purposes. All methods of branch accounting which make use of a sales commission or an independent factory price produce this result. It is the result, moreover, which would be obtained by ordinary methods of accounting for independent concerns. When goods are distributed through independent dealers, it is the manufacturer who must bear abnormal idle capacity costs. All further references to

conversion cost or production cost will, therefore, rest on the assumption that these costs include only a normal or average amount of overhead and not unusual allowances to cover the cost of abnormal idle capacity.

DISTRIBUTION COST.

7. Distribution cost includes all expenses which relate directly or indirectly to the product from the time it leaves the factory door until it has been sold and the proceeds collected. In general, the function of distribution consists chiefly of activities of four types :

- (1) Creating demand — that is, arousing effective desire on the part of the customer for the product which the enterprise has to sell, through advertising, promotion, solicitation, etc.
- (2) Obtaining orders — that is, converting this demand into a specific agreement for the purchase of the product, through contact by salesmen or otherwise.
- (3) Handling and delivery — that is, conducting the physical operations incident to storing, sorting, grading, packing, loading, shipping, transporting, and delivering the product.
- (4) Realising on the sale — that is, arranging credit terms, billing, posting, preparing statements, collecting, handling, and depositing cash, with which may be included for convenience other clerical work in connection with sales record-keeping generally. ¹

8. The costs applicable to each of these types of activity fall into three groups :

- (1) Direct costs — that is, items of expense which apply directly to some one product, or territory, or customer (as the case may be), and to no others.
- (2) Semi-direct costs — that is, items which relate in a general way to several different products or territories or customers, but which arise out of some measurable service function, and which may therefore be distributed in accordance with the amount of the service required for the item being costed.
- (3) Indirect costs — that is, items which have no ascertainable relationship with any one product, territory, customer, etc., as distinguished from any other, and which must therefore be apportioned over all items costed on a theoretical or arbitrary basis. ²

9. In order to reduce the zone of uncertainty which is present in all apportionments, a definite effort should be made to place expenses in the first two groups, keeping the third at a minimum. A careful analysis will often reveal expenses which are usually classed as indirect but which may be handled as semi-direct.

10. For the purpose of making a correct allocation of profit to branches, it is essential that all costs of distribution be analysed :

- (a) By territories ; and
- (b) By products.

11. The making of such allocations is exceedingly complex and far beyond the scope of the present enquiry. In order to make a satisfactory allocation of distribution costs to branches and to products, a concern might, however, proceed somewhat as follows :

12. (1) Classify all operating expenses of the enterprise into three groups :
 - (a) Expenses relating definitely to production ;

¹ PATON, W. A., " Accountants' Handbook ", Ronald Press Co., New York, 1932, page 1333.

² *Ibid.*, page 1347.

- (b) Expenses relating definitely to distribution ; and
- (c) Administrative expenses and the expenses of financial management not relating definitely either to production or to distribution.

13. (2) Apportion administrative and financial expenses to production and distribution.

14. (3) Separate the total cost of distribution into :

- (a) Expenses relating to domestic business ; and
- (b) Expenses relating to export business.

15. A concern which has a substantial export business will usually have an export department against which all expenses relating to foreign branches may be charged. In separating the costs of domestic and export business, an apportionment of the expenses of general sales management including a share of the general administrative expense, will be necessary.

16. (4) Divide the expenses relating to export business into :

- (a) Expenses relating specifically to the operation of foreign branches — *i.e.*, expenses which would necessarily be incurred directly by these branches if they were not paid by the home office ;
- (b) Other expenses relating primarily to the supervision of export business and to the handling of products to be exported.

17. (5) Allocate to products exported the internal handling charges and supervisory expenses of the export department (expenses included in 4 (b) above) and treat them as charges to be paid by the manufacturing branch or division out of the price obtained from the sales branch.

18. Expenses of this character take the place of the selling expenses which would be necessary if goods were to be sold to independent dealers. Such costs might, therefore, be presumed to be covered by independent factory prices charged to a sales branch. If sales branches are charged at a constructed factory price, these expenses should be added as an element of cost in order to bring the constructed price as nearly as possible into line with market or dealer prices.

19. (6) Allocate all branch operating expenses, including those mentioned in 4 (a) above, to the products handled by the branch.

20. The bases to be used in making allocations of distribution cost to products depend so largely upon conditions within each organisation that they cannot be discussed here. As a matter of fact, methods of allocating distribution costs are in such an embryonic stage of development that much further work will be necessary before any generally accepted procedure will emerge. After all the costs of production have been allocated on some reasonable basis, however, the accounts will show the profit realised by the enterprise on each line of product handled by each sales branch. The profit so determined will not be an exact or absolute amount, but it will be sufficiently accurate to serve as a basis for decisions of business policy and it should, therefore, be considered satisfactory for tax purposes.

21. After a concern has made detailed allocations of distribution costs to products sold during a number of periods, it should be possible to set standards for distribution activities. If carefully worked out, these standards will show how much it ought to cost to distribute each product and these ideal or standard costs may be used in lieu of the actual allocations. The use of standard costs greatly simplifies the accounting for the different lines of product and, at the same time, gives a running comparison between actual distribution costs in total and the amount which should have been spent as shown by the standards.

22. The allocation of distribution costs to the product handled by each branch completes the work of expense analysis. It should now be possible to prepare a complete statement for each line of product handled by each branch showing sales by the branch, the production cost (materials plus conversion cost) and the distribution cost of the goods sold. The excess of sales over production and distribution costs is the net profit of the enterprise on the particular line of goods handled by the particular branch. This net profit is the result of manufacturing in one country and selling in another, and a reasonable method must be found for dividing it between the two functions. In the absence of an independently determined price, this division may be accomplished by constructing a factory price or by apportionment. Methods for effecting this division are discussed in Chapters VI and VII of this report.
