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EDITORIAL

A Sales Tax Is Theoretically Equitable

When casting about for means to meet the constantly swelling volume of national and state expenditure every possible scheme of taxation receives consideration. For the past three or four years there has been a great deal of talk about the desirability of spreading the tax levies so that every one would be compelled to contribute according to his several ability; and the one plan which has seemed most feasible, in the face of political opposition to any form of taxation which would touch the majority of voters, has been a tax upon sales. On the surface there seems to be everything to recommend it. Everyone buys something, and a tax upon sales, therefore, is supposed to reach everyone according to his purchasing power. Many eminent economists have advocated a national sales tax, and there has been almost a consensus of opinion that if congress could be induced to pass a law providing for such a tax all our difficulties would be overcome, our debts would be paid and everybody would feel a little of the pain of paying. So far, the federal congress, with its eye ever open to the effect upon the proletariat, has refused to adopt this plan. Many states, however, have enacted sales-tax laws, the experiment has been given a fair and extensive trial and it is now possible to form some opinion of the efficacy of this kind of taxation. It seems that it should be reasonably easy to devise a method of taxing sales which would not work a hardship greater than necessary and would at the same time produce enormous

revenues. In many states where the experiment has been given a trial it is definitely understood that the proceeds of the sales tax shall be devoted to the payment of the dole. This appears to have many advantages. It impresses upon everyone who pays the tax the fact that a large percentage of the population is doing no work whatever and may not desire to work; and the knowledge that every cent paid in the form of sales tax is in reality a contribution to the maintenance of some less active person is supposed to create a sentiment inimical to the needless continuation of relief to the idle. The amounts paid on each purchase are generally so small as to be inconsiderable and, although the aggregate is large, the extraction of the tax from the buyer is supposed to be almost painless. These are the theories underlying sales taxation.

In Practice Not Desirable

The fruit of the experiment is not according to sample or prediction. The amounts collected are in almost every case less than was expected and the difficulty of collection is out of all proportion to the benefit derived. So many problems arise in the assessment and collection of sales tax that it seems probable that the scheme will be abandoned. Unless there be a federal sales-tax law it is impossible to lay a tax upon sales of goods to be delivered outside the state in which the sale occurs. This means that two contiguous states, each having a sales tax, will lose a large portion of the amount to which they would be entitled if there were a federal law, because goods purchased in the city of New York and delivered in New Jersey and goods purchased in New Jersey and delivered in New York both escape this specific tax. Then again the expense involved in collection is preposterous. We have before us the record of a company engaged in a business in New York whose sales are almost exclusively by mail outside the state. The amount of tax collected and turned over to the New York authorities is small, but the accounting department of the company in question is put to so much difficulty, there is such an enormous increase in clerical labor, that for every dollar turned over to the government of the city or state the company collecting the tax expends approximately $5.00 in clerical hire. Then, again, there are innumerable small businesses in which there is no competent bookkeeping department. Owners and managers of these little businesses are confused by the technicalities of the tax laws and spend sleepless nights trying to find

out whether they should pay this amount or that amount, never quite sure that whatever amount they pay may not be contrary to the provisions of the law. A further complication is added by the fact that goods sold for resale can not be taxed because the sales tax is supposed to rest upon the ultimate consumer alone. There is grave difficulty in separating goods for resale and goods for immediate consumption. This again involves extensive bookkeeping records and expense which the law originally never contemplated.

Difficulties and Protests

Every accountant has probably been confronted by problems almost beyond solution when advising his clients about the proper amounts of tax to be collected. No one can decide such points by any rule of thumb, and yet the penalties for an infraction of the law are terrifying. In the last issue of THE JOURNAL OF ACCOUNTANCY we advocated strenuously the placing of an income tax on all incomes however small. During the early part of August the finance committee of the senate of the United States considered a scheme of taxation which would have reduced the exemption of a single person to $800. Such a storm of protest arose throughout the country that the plan was abandoned almost before it had been announced. Yet this would have been a great improvement upon any existing system of taxation. Political aspirations were controlling. It would never do in this great democracy of ours to take a risk of losing the vote of the poorer classes. They must always be kept quite free from the burden of taxation in a form which they could recognize as taxation. It was not a pleasant spectacle to witness this abrupt about-face, but the change was not unexpected. No one who understands the exigencies of politics expected that so good a measure could ever become law. And in a somewhat similar way the sales tax in its various state forms probably will not endure. It is a nuisance. Nobody likes it, and in some states at least the political future of those who voted for sales taxes is anything but brilliant. Probably, therefore, we may expect an early change of sentiment in legislatures, and the sales tax will be thrown out because of its unpopularity, the difficulty and uncertainty of its collection and the comparatively unsatisfactory financial result. It seems a pity that a scheme which has so many superficial merits should lack the possibility of adequate administration. It serves to demon-

strate, however, once again that income taxation is the one form which can be made to bear proportionately upon all classes of the community. As we said in an earlier issue of this magazine, the ideal will never be reached, but at least it is something to know, as far as one can know, that in a broad assessment of income tax the necessary revenues could be provided and everyone would carry his share of the load which threatens to overwhelm us.

A Proposal to Reduce Monetary Units

The lighthearted and airy indifference to ultimate effect with which much proposed legislation is offered is well illustrated by the suggestion, said to emanate from the administration at Washington, that coins of value less than a cent be minted and placed in circulation. The excuse for this proposition was that it would take care of the fractions of a cent involved in the payment of sales taxes. It was suggested that half cents and mills be provided for the payment of fractional taxes. At the first casual glance there seemed to be no special reason why such a plan should not be adopted. It would immensely complicate the counting of cash and would bear heavily or at least cumbrously upon the pockets of everyone who had cash to carry, but beyond that there was little immediate indication of the chaotic condition which would result were the suggestion ever accepted. No one who made the proposal seems to have taken into account the difficulties which would instantly ensue in all matters of bookkeeping and recording. Indeed, if we did not know that the stationers of the country had nothing to do with the suggestion one might almost believe that they were its originators, because every journal, ledger, cashbook or other vehicle of accounts would have to be changed entirely and columns would have to be set to take care of these various fractions of a cent. All stocks of stationery now in hand for the use of bookkeepers would have to be discarded, and there would be a rush to procure amended forms which would take care of this breaking down of the monetary units of custom. We have been shown a copy of a letter addressed by a corporation to various members of congress and senators. In the letter some of the arguments against fractional currency are so well presented that we have asked and obtained permission to reprint the letter. The writer says:

"The reference to the possibility of legislation permitting the issuance of fractional cent coins is very disturbing to us and

should be to those businesses that have a large number of small transactions and where the overhead, due to billing, bookkeeping and other clerical transactions, represents a substantial item in the cost of doing business.

"All of our accounting records, from the original order blanks, through invoicing, into the bookkeeping and final statements are arranged to take two 'cent' columns. The injection of a fractional cent column means the preparation of a huge quantity of stationery and practically entirely new sets of books. This might mean all new files, new cashiers' equipment, as well as new adding and calculating machines. This would be a very serious handicap and call for a tremendous expenditure at a time when it can not be afforded.

"Where the average transaction today is in three digits, to add another digit would be to increase the accounting expense roughly 33⅓%.

"It is stated by some who advocate these small coins that they would be just handled around the stores in connection with sales tax and no records kept. This sort of a plan we can hardly concur with. In fact, it is inconceivable, because books are balanced to eliminate errors, and if we leave out of our picture any amounts we would never know whether our books are in balance or otherwise.

"Particularly at this time, with costs continuing to increase as they have been during the last two years, and with superhuman efforts being made to prevent any price increases to our customers, the continued loading of additional expense creates a very serious situation.

"We urge you to and hope that you will oppose any legislation which permits the issuance of fractional coins as not being justified; the little additional help in the case of those states having sales taxes is of small moment compared to the huge extra cost to nearly everybody in the whole country. Instead of saving money to the public, it means a decided increase in the cost of practically all merchandise."

Small Currency, Small Prosperity

It is the experience of many countries that when coins of very small value are in circulation there is inevitably a condition of insecurity and a prevalence of poverty. There does not seem to be any valid reason for this fact, but a fact it is nevertheless. In countries where there is great prosperity the use of the smaller coins is gradually abandoned. For example, in the western part of our own country during the prosperous days it was rare indeed to see a cent. The smallest unit of exchange was the nickel and in many districts nothing smaller than a dime was to be found. In the gold fields of South Africa where there was great

prosperity, the smallest coin in circulation was the "tickey" or three-penny piece. The ordinary penny was minted, but seldom seen. On the coast of Africa where prosperity was less superlative copper coins were in daily use. Other instances of the same condition could easily be cited. There does not seem to be any law of economics which will explain the facts, but perhaps they may be interpreted by psychological analysis. Where people have plenty of money they do not care to be bothered by little and insignificant coins. Where money is scarce every fraction counts. It may be argued that America is now in so sorry a plight she must fall back upon the expedient of impecunious countries and deal penuriously with fractions of cents. As has been said many times in the last few years, it would be an admirable thing if proponents of legislation would stop to think just a little.

The Significance of Letter-heads

We have received from John S. Lloyd, secretary of the Montana Association of Certified Public Accountants, some highly interesting comments upon the nature of letter-heads used by professional accountants. The whole subject of what may or not appear on a letter-head has often been discussed by professional organizations of all sorts. The early inclination to tell the world one's virtues and peculiar abilities has generally given place to a conservative and blunt statement of fact. No lawyer of standing would adopt a form of letter-head which would meet with the adverse criticism of his fellows. No reputable physician or surgeon would cry his wares at the top of a letter. And we believe that few accountants would fall into similar disgrace. Mr. Lloyd, however, quotes one illustration which is worthy of repetition. The letter-head reads: "John Doe and Company, Certified Public Accountants, New York. Courteous—Competent—Confidential Service, Auditing—Accounting—Systematized Bookkeeping, Systems, Federal Taxes—Investigations—Inheritance & Estate Tax Investigations—Bank Examinations," and then at the bottom of the letter is printed: "Admitted to practice before the Treasury Department by our furnishing proof of character and ability." Mr. Lloyd says:

"Rather than give way to much provoked feelings, I make the suggestion that if this letter-head had been printed or engraved to read 'John Doe & Company, Certified Public Accountants, New York,' it would be so inclusive as to imply all that was spread out

on the first illustration. One of the principal weaknesses in the accounting profession is the desire to 'strut our stuff,' forgetting that as a profession it is unexcelled, second to none in its unique, confidential relationship to the public. The non-certified practitioner does not possess the coveted C.P.A. certificate and the only means he has of telling folk how good he is comes through the channels of 'spreading it all over his letter-head.' Possession of the C.P.A. certificate automatically gives one a public reputation, which he very jealously guards and protects. With the use of the designation 'certified public accountant' he protects his own reputation and sets up a sign-post to guide the public in the selection of a qualified accountant.

"There are some splendid firms of certified public accountants which use the term 'accountants and auditors' only. This attitude is to be commended because of a sort of unselfish spirit. However, if the certified public accountant will state on his letter-head that he is a certified public accountant, credit organizations and those interested will be saved the annoyance of inquiry. If a certified public accountant will confine his letter-head to the terminology 'certified public accountant,' it will indicate that he subscribes to proper rules of professional conduct. He should be a member of his professional organizations and be admitted to practice before our various governmental units. There is no purpose served in spreading this information all over a letter-head.

"A letter-head is introductory to a conversation. Think how really ridiculous it would be for John Doe to step into the office of the executive of a corporation and start his conversation somewhat like this—'Good morning sir, my name is John Doe, certified public accountant of New York. I have been admitted to practice before the treasury department and the board of tax appeals; our specialty is auditing, accounting, systematized bookkeeping, federal taxes, investigations, systems, inheritance and estate-tax investigations, bank examinations, cost and budget systems,' and then finish up by quoting his membership in three accounting organizations. This sort of conversation would be foolish, but not any more so than if the same information were spread out on a letter-head.

"We can raise the standard of our profession several notches if we will all have in mind our approach to the public. This approach is preëminently through the channels of our letter-head. Let's make the approach a gesture of courtesy, dignity and character."

With all this we most heartily agree, and we doubt exceedingly if there be many instances as objectionable as the one which our correspondent records. In the rules of professional conduct of the American Institute it is provided that "no member or associate of the Institute shall advertise his or her professional attain-

ments or services through the mails, in the public prints, by circular letters or by any other written word, except that a member or an associate may cause to be published in the public prints what is technically known as a card. A card is hereby defined as an advertisement of the name, title (member of American Institute of Accountants, C.P.A. or other professional affiliations), class of service and address of the advertiser, without any further qualifications, words or letters, or in the case of announcement of change of address or personnel of firm, the plain statement of the fact for the publication of which the announcement purports to be made." This inhibition certainly covers the subject of letterheads.

An Example of Competitive Bidding

We feel that no apology is necessary for returning to the subject of competitive bidding for professional work. For many years we have made it a constant policy to do everything possible to bring an end to this reprehensible and injurious practice. The thing still persists and at times the prospects seem discouraging. However, there is a ray of hope here and there. We have just received a letter from a distinguished member of the Institute from which we quote the following important statements after making alterations in amounts to conceal the place and the firms involved. Our correspondent says:

"For nearly twenty years we have made the annual audit of this city. The cost ranged from $4,000 to $7,000 per annum. Last year the authorities decided that they wanted bids for this work. As usual, politics entered into the matter and the work was awarded to a firm which quoted $2,800. This year the city again called for bids. Last evening they were received and opened. At the insistence of friends we made the proposition so low that it will barely pay the salaries of those employed on the engagement. I am giving you this information for one reason only, because I want you to know how disastrous this bidding business is to the accountants. Fortunately, we can 'take it,' but if it hadn't been for some of our friends we certainly would not stoop to conquer. I wonder if it should be called conquering or losing?

"I do wish that the Institute could do something to educate the public, especially in this part of the United States, so that there would be no call for bids for municipal or other audits. I have recently been advised that a state university called for bids not long ago for an annual audit and the accountants of that state

refused to bid. They stated that their per diem was $25.00 a day for senior accountants and $15.00 a day for junior accountants. The authorities of the university should choose the firm or person they wished to have undertake the work. This is, to say the least, encouraging."

We should say that it is rather more than encouraging. It is another illustration of the strength of coöperative attempts to overcome evils. If the accountants of every state would stand fast against bidding they could destroy it in a year. We have said this many times, but until the accountants as a whole realize their strength nothing satisfactory will be accomplished.

Time and the Candidate

A correspondent takes exception to the arguments adduced in these pages last July on the subject of unpreparedness of candidates. He feels that the example which was chosen to illustrate lack of education should not have been taken from the commercial-law paper but rather from the examination in accounting. He argues that more failures occur in accounting than in either law or auditing, and that the reason for the heavy mortality in the accounting examination is a lack of time. He further alleges that in one state the board permitted candidates an extra hour over the allotted time in accounting. He says, "I doubt if the percentage of those passing increased materially. That, however, would not prove that time did not enter into it. It was like giving a prize fighter a couple more rounds to knock out his opponent, after giving everything he had in the first fifteen rounds. Speed and endurance are not supposed to be the governing factors in a C.P.A. examination, but they actually work out that way." This is an old argument and there may be some truth in it. On the other hand, whatever the length of time allowed there would always be some one who would feel that he could have done much better had he been given an additional hour or two. We do not know definitely the procedure followed by all states in the preparation of examinations, but we do know that the examinations prepared by the American Institute of Accountants (and these are used in the majority of states) are very carefully compared and tested under examination conditions, and it is quite a common occurrence to reduce the length of an examination because one of those who were testing it felt that there was a possible shortness of time in which to present a complete answer.

In other words, the examiners have always before them the question of time required by a reasonably competent candidate, and they make great efforts never to permit any crowding of too much matter within the time limit. The states which do not coöperate with the Institute doubtless follow the same fair principle. Our correspondent makes other allegations about the examinations which seem to reflect personal experience rather than broad consideration of the subject. The whole matter, of course, is as old as the hills. Those who succeed are always pleased and those who fail have, naturally enough, a grievance. It would be ideally perfect if no examinations were necessary and if everyone who thought he should be an accountant were really entitled to be one. But some must win and some must fail, and, after all, that is the stuff of which life is made.

Financial Statements and the Uncertain Dollar

By Ralph Coughenour Jones

The concept of the balance-sheet as a list of assets and liabilities and of the profit-and-loss statement as a summary of income and expense is so simple, and the superficial appearance of mathematical exactness is so reassuring, that many readers, if not the great majority, impute to these statements a degree of accuracy which is seldom attained in practice. Unfortunately for the peace of mind of the accountants who prepare the statements and of the directors, bankers and investors who must perforce rely upon them, every item in these statements must be expressed in terms of money. The dollar, the pound, the franc or other monetary unit must be used as a common denominator to permit land, buildings and machinery to be added to inventories, accounts receivable, patents and goodwill. The process of expressing such diverse items in terms of a common unit is known as valuation, the most important and the most difficult problem of accounting or finance.

The accountant, particularly the public accountant, is inclined to deny that valuation is a function of accounting. The accountant, according to this view, must accept the valuations agreed upon between the parties to bona fide transactions or deals and construct a set of accounts which constitute an accurate historical record. Viewed in this light, a balance-sheet is the cumulative result of all the transactions of a business since its inception and not in any sense a statement of current values. The layman, however, unless he has been initiated into the mysteries of accountancy, undeniably assumes that the balance-sheet is supposed to represent current values, whether it does in fact or not. And many accountants agree with him.

The business man has not been much interested in the theoretical basis of accounts, but under the pressure of financial necessity he has been compelled to recognize important changes in value. Accordingly, appraisals were ordered and plants were written up on an extensive scale after the war period of rising prices. And, during the depression of 1930, plant and property valuations were drastically reduced. As a result, the reports of many companies are a hodgepodge of diverse valuations which indicate neither historical cost nor current values.

Practical men, moreover, have not overlooked the effect of changed valuations on the income account. One motive for the plant write-downs of the 30's was the desire to reduce depreciation charges in keeping with current values. Likewise, various inventory methods, such as the base inventory and last-in-first-out methods, and price equalization reserves, such as that employed by the Procter & Gamble Company, are designed to prevent undue profit distortion as a result of price fluctuations. The theoretical discussions of valuation have dealt largely with balance-sheet aspects, although, as the illustrations to follow will emphasize, the effects of various methods of valuation on the income account are far more important.

In the past, asset revaluations have as a rule been made and recorded only when the book figures were radically out of line with current values. Write-ups have commonly occurred when the price level was at or near a peak, and write-downs when prices generally were at a minimum. As a result, the changes have been irregular and drastic, and the value of the financial statements for comparative purposes has been seriously impaired. In order to make the accounts reasonably reflect current conditions and to avoid abrupt value changes, numbers of accountants have recommended that fixed-asset accounts be regularly adjusted by means of an index number. Gradual changes thus computed would be better than the irregular revaluations which have occurred in the past, but the recording of index-number adjustments on the books conceals historical costs and at best constitutes only a partial solution to the general problem of valuation. Even though fixed asset values were satisfactorily determined by index numbers, the more important problem of inventory valuation would still remain.

Finding myself substantially in agreement both with the view that accounts should be based on historical cost and with the view that financial statements should reasonably reflect current conditions, I have sought a method of reconciling the two. It is my conclusion that the heart of the difficulty lies neither in the principles of accounting nor in the diverse price movements of different kinds of goods and services, but in the unstable dollar. The dollar serves very well as a medium of exchange but quite inadequately as a measure of value. It is true that the prices of individual commodities or limited groups of commodities may have independent trends, but it is almost inconceivable that the com-

plex properties of a large corporation should deviate far from the general level of prices. If this be true, it will be more fruitful to study the shifting value of the dollar itself rather than the changing prices of various commodities or commodity groups. Accordingly, I shall present three propositions relating to the dollar as a measure of value, then an extended illustration of the effects of a changing dollar on the ordinary financial statements and, finally, some conclusions to be drawn from the illustration.

I. The Dollar and Other Monetary Units Do Fluctuate in Value

To a generation which has seen the utmost chaos in the foreign exchanges, has seen the German mark vanish into nothing and has seen the gold content of the dollar changed for the first time in a hundred years, the truth of the above proposition should be evident. To some extent the real nature of money is beginning to be understood. In his *Analyzing Financial Statements*, Gilman remarks: "The older concept of the dollar as an unchanging unit has been replaced by an understanding that the dollar itself fluctuates in value." There are many, however, who do lip service to this idea but act at the same time as if the dollar were a fixed unit of value. They say that the dollar changes, and they proceed to compute their profits or losses in the same old way. Even during the period of hyperinflation in Germany the people within the country thought not of the fall of the mark but of the terrific rise in prices.

This point has been thus belabored because it is fundamental. Everyone is so accustomed to thinking of the monetary unit of his country as a constant that it requires a real mental effort and a marked shift in point of view to accept the idea of a variable unit with all its implications. For anyone who believes, however, that the dollar of 1935 is the dollar of 1932, of 1919 or of 1913, the rest of this article will be meaningless.

II. The Variations in the Value of the Dollar Can Be Measured with Reasonable Accuracy

A dollar is worth what it will buy. This is called its purchasing power. It has no intrinsic value. Formerly, the dollar was worth 25.8 grains of gold; theoretically it is now worth 15.2 grains. At various times it has been worth one bushel of wheat; at other times, two bushels. If there were dollars and wheat and

no other commodities or services in the market, the value of the dollar would be measured in terms of wheat. Since there are in fact many commodities and services, the value of the dollar must be measured by an index number. If all the goods and services, food, clothing, shelter, transportation, entertainment, building materials, hours of labor, stocks and bonds which the American people buy in a year could be listed and the number of dollars required to buy them in one year could be divided by the number required during the previous year, the reciprocal of the result would indicate the exact purchasing power of the dollars of the second year in terms of the dollars of the first or base year. All the transactions of a year obviously can not be considered, but an intelligent weighting of the more important elements will provide an index which closely approximates the ideal. Statisticians may argue about the refinements of index-number construction, but even a poor index would provide a better measure of value than the currencies of many, if not all, countries have done during the past twenty years.

Carl Snyder, economist for the Federal Reserve bank of New York, has developed an index of the general level of prices from 1860 to date. The reciprocal of this index indicates the relative purchasing power of the dollar in terms of the dollars of a given year. The index itself is based on the year 1913, but by a simple computation any other year may be treated as the base. This index has twelve components including wages, rents, realty values, security prices, etc., in addition to the usual commodity prices. As a result, it fluctuates less than an index of wholesale prices and gives a more trustworthy measure of general purchasing power.

This index, though less volatile than indexes of basic commodity or wholesale prices, shows important changes in purchasing power. Since 1915 the average purchasing power of the dollar has changed in every year except 1927. In terms of 1926 dollars, the average change has been 8¢, slightly under 8¢ in years of rising prices and almost 10¢ in years of falling prices. In one year the change amounted to 23¢, and in three other years it was from 14¢ to 20¢. These changes, moreover, are as a rule cumulative over a number of years. The purchasing power fell 82¢ (in terms of 1926 dollars) from 1915 through 1920, rose 19¢ in 1921 and 1922, and then fell 13¢ from 1923 through 1929. From 1930 to 1933 inclusive, it rose 38¢ and in 1934 fell 8¢. These changes are too

significant to be disregarded in any careful analysis of the financial condition of a business enterprise.

The idea of developing and using a standard and invariable unit of value, distinct from the monetary unit which is primarily a medium of exchange, may at first seem radical. It is, however, very similar to the process by which standards of length and weight were developed. The common unit of measurement in ancient Egypt was the cubit, the length of the forearm from the elbow to the end of the middle finger. The foot originally was the length of a human foot. The yard was the distance from the point of Henry I's nose to the end of his thumb. The inch was the length of three barley corns taken from the middle of the ear. Such rough and ready measurements may have been tolerable in an unscientific age, but today how would interchangeable parts be manufactured or specifications written in terms of such uncertain units? Master gauges now measure to the millionth part of a necessarily invariable inch.

The concept of an abstract unit of length, so familiar and therefore so commonplace to us, was the result of a long process of gradual development. Length at first was measured in relation to such well known and intimate accessories as hands, feet and arms without the concept of an abstract unit. The dollar is still in this crude stage. Since it must serve as a medium of exchange and be itself affected by the very transactions whose magnitude it measures, an abstract unit for the measurement of value will be necessary, if any but the crudest results are to be obtained. Such a unit we may call a standard dollar, which is merely the dollar of some selected period in terms of which the dollars of other periods may be evaluated. With the experience of the physical sciences before us, we should be able to accept and use this abstract unit of value without a long period of evolutionary development. The inertia of the human mind is such, however, that a catastrophic change in prices must usually occur before the serious errors resulting from the change in the value of the monetary unit are generally recognized. Hastily improvised methods are then introduced after it is too late to deal effectively with the situation. There is evidence that French business men did profit somewhat from the German experience. It would be an unparalleled achievement if American business men, taking their cue from monetary disturbances in other countries, should prepare in advance for important changes in the value of the dollar which may

or may not occur as the result of recent monetary and banking legislation in the United States.

III. An Apparent Gain Which Brings No Increase of Purchasing power and an Apparent Loss Which Results in No Diminution of Purchasing Power Are Both Alike Unreal, Fictitious and Misleading

Regardless of balance-sheet valuations, whether based on historical cost, appraised values, or what not, here lies the key to the correct determination of income. It has long been recognized as desirable to exclude market appreciation and capital gains and losses from the operating income account; but the accomplishment of this result has been rendered difficult by the fact that the dollars in which costs were measured were often larger or smaller than the dollars in which selling prices were expressed. It can hardly be denied that the actual purchasing power involved in a given transaction is more important than the number of monetary units, yet it is the peculiar aptitude of accounting to record only the number of units without regard to their purchasing power. If a man buys a book for ten monetary units called dollars and immediately resells it for one hundred monetary units called dimes, no one would claim that he has made a profit on the transaction. But if he buys the book for $10, holds it for a number of years, and sells it for $100 at a time when the purchasing power of the dollar is only ten cents, he has by all the canons of law and accounting realized a profit of $90. This may be good law, especially if it is income-tax law, but it is absurd economics. The accountant, since he must consider both law and economics, may be compelled to record the transaction in the orthodox way, but he is certainly under no obligation to deceive himself and mislead others in reporting and interpreting the result.

The fact is that income taxes applied to gains of this character are capital levies. Taxpayers who have received no real increment of value are compelled to transfer to the government a part of the purchasing power which they originally held. Since a large proportion of so-called capital gains is of this character, it is no cause for wonder that our income-tax laws hinder and prevent desirable transfers of property. A man might be willing to share his real income but not his capital with the government. There is a possibility, however slight, that the courts may ultimately recognize the fictitious character of such gains. In the gold-clause

cases, the supreme court denied that the claimants had suffered any damage, on the ground that the purchasing power of the dollar had not fallen. Is it inconceivable that the converse of this idea may at some future time be used for the benefit of the taxpayer? The chances for the adoption of such a rule would be materially improved if it should become the accepted accounting practice rigorously to exclude all such fictitious gains and losses from the income account. The extent to which the effects of these gains and losses permeate the customary financial statements will be brought out in the example which follows.

An Illustration

The fact that financial statements are significantly influenced by the changing value of the dollar is generally admitted even by those accountants who maintain that nothing can or should be done about it. It is commonly assumed that the expert analyst or business executive who reads balance-sheets and profit-and-loss statements in the light of a broad experience and an intimate knowledge of current conditions can interpret the results with reasonable accuracy. Whether this is true or not will depend in large measure on the degree and kind of variations which the changing dollar introduces into the statements.

The statements of the Hypothetical Manufacturing Company are based on a simple set of assumptions in which the only important variable is the change in the purchasing power of the dollar. During a three-year period it is assumed that the dollar falls in purchasing power at the rate of four cents per quarter or sixteen cents per annum. Stated differently, the price level rises from 100 to 192 in three years—a rapid but not unprecedented change. The average purchasing power of the dollar during each quarter and the purchasing power at the end of each quarter are shown below. The index number of prices is the reciprocal of the purchasing power in each instance.

Assumed purchasing power of the dollar by quarters

Quarters	Average purchasing power for quarter			Purchasing power at end of quarter		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
First	.98	.82	.66	.96	.80	.64
Second	.94	.78	.62	.92	.76	.60
Third	.90	.74	.58	.88	.72	.56
Fourth	.86	.70	.54	.84	.68	.52

THE HYPOTHETICAL MANUFACTURING COMPANY

Comparative profit-and-loss statements

	Year		
	1	2	3
Sales	$871,628	$1,056,296	$1,340,809
Cost of goods sold	584,386	683,424	839,252
Gross profit	$287,242	$ 372,872	$ 501,557
Selling and general expense	196,116	237,668	301,682
Net profit	$ 91,126	$ 135,204	$ 199,875

Surplus account

	Year		
	1	2	3
Balance at beginning of year	.....	$ 31,126	$ 86,330
Net profit for year	$ 91,126	135,204	199,875
	$ 91,126	$ 166,330	$ 286,205
Dividends paid	60,000	80,000	120,000
Balance at end of year	$ 31,126	$ 86,330	$ 166,205

THE HYPOTHETICAL MANUFACTURING COMPANY

Comparative balance-sheets

		End of year		
Assets	Beginning of year 1	1	2	3
Current assets:				
Cash	$ 200,000	$ 239,070	$ 292,210	$ 342,210
Receivables	200,000	232,558	285,714	326,523
Raw materials, at cost	40,000	46,512	57,143	74,074
Work in process, at cost	22,500	25,320	30,514	38,685
Finished goods, at cost	87,500	98,190	117,844	148,792
	$ 550,000	$ 641,650	$ 783,425	$ 930,284
Fixed assets:				
Plant and equipment (including land, $50,000)	$ 850,000	$ 850,000	$ 850,000	$ 850,000
Less: reserve for depreciation	250,000	314,000	378,000	442,000
	$ 600,000	$ 536,000	$ 472,000	$ 408,000
	$1,150,000	$1,177,650	$1,255,425	$1,338,284

Liabilities and net worth				
Current liabilities:				
Accounts payable.....	$ 50,000	$ 46,524	$ 69,095	$ 72,079
Funded debt—bonds payable.....	100,000	100,000	100,000	100,000
	$ 150,000	$ 146,524	$ 169,095	$ 172,079
Net worth:				
Capital stock, par $100.	$1,000,000	$1,000,000	$1,000,000	$1,000,000
Surplus.....	.....	31,126	86,330	166,205
	$1,000,000	$1,031,126	$1,086,330	$1,166,205
	$1,150,000	$1,177,650	$1,255,425	$1,338,284

Judged by all the usual criteria, this company has made an excellent showing. Profits have more than doubled, having risen from 9 per cent. of the net worth to over 18 per cent. Sales have increased relative to plant, net worth, inventories and receivables. The percentages of both gross and net profits to sales have increased materially.

Percentages of gross profit and net profit to sales

Year	Gross profit	Net profit
1.....	33%	10½%
2.....	35%	13 %
3.....	37%	15 %

Liberal dividends have been paid at the rates of 6, 8 and 12 per cent., and yet 39 per cent. of the profits have been carried to surplus. The current ratio has risen from 11 to 1 at the beginning to 13 to 1 at the end of the three-year period. The entire indebtedness of the company could be paid off and still leave almost as much cash as was on hand at the beginning.

Those persons who believe that the reader should be left to his own devices in interpreting accounting reports are asked to stop at this time to consider the situation just described in the light of the known facts. The period was one of steadily rising prices in which everyone apparently was making money. No doubt there were complaints about the high cost of living, but business was enjoying a "boom." Let the analyst make such conservative allowances as he deems proper and then compare his results with the analysis which follows.

Before proceeding further, however, it is necessary to state the assumptions on which the figures are based. Hypothetical figures are used throughout for two reasons: first, adequate data for an actual company are not obtainable for a sufficient period of years and, second, such figures if available would contain so many variables as to defeat the underlying purpose, which is to show in bold relief the effect of a changing dollar on the customary accounting reports.

It is assumed, therefore, that the physical volume of purchases, inventories and sales was absolutely constant throughout the entire period. It is assumed further that the costs per unit of product expressed in standard dollars were constant at the following rates:

		Per unit
Material		$ .20
Labor		.20
Burden		
Depreciation	$.08	
Other factory expenses	.22	.30
Factory cost		.70
Selling, general and other expenses		.22½
Net profit		.07½
Selling price		$1.00

The further assumption is made that the prices of all goods and services bought and sold by the Hypothetical Manufacturing Company varied directly with the rise in the general level of prices and inversely with the fall in the purchasing power of the dollar. It is recognized that in an actual situation some prices, particularly wage rates, would lag behind others, but such economic phenomena are not pertinent to the present discussion. The lag in wage rates, for example, would throw more profit into the period of rising prices and less into the period of falling prices, but it would in no wise invalidate the inferences to be drawn from the illustration. If wages lag, raw material prices usually precede the rise in the general level of prices and an average of the two may follow the general level rather closely. Inventories throughout are valued at cost on the first-in-first-out basis. Finished goods are priced at the average cost of goods completed during the preceding quarter.

Based on these assumptions a set of statements expressed in standard dollars, i. e., the dollars in which the original balance-

sheet was stated, may be readily prepared. The profit-and-loss statements are, of course, identical for each year.

HYPOTHETICAL MANUFACTURING COMPANY
Profit-and-loss statement expressed in standard dollars

	Years
	1, 2, and 3
Sales	$800,000
Cost of goods sold	560,000
Gross profit	$240,000
Selling and general expense	180,000
Net profit	$ 60,000

Surplus account expressed in standard dollars

	Year		
	1	2	3
Balance at beginning of year	.....	$(40,912)	$ (99,996)
Net operating profit	$ 60,000	60,000	60,000
	$ 60,000	$ 19,088	$ (39,996)
Shrinkage in purchasing power of net dollar balances	$ 45,712	$ 58,284	$ 71,744
Dividends paid	55,200	60,800	72,000
	$100,912	$119,084	$ 143,744
Balance at end of year (deficit)	$(40,912)	$(99,996)	$(183,740)

HYPOTHETICAL MANUFACTURING COMPANY
Comparative balance-sheets expressed in standard dollars

	Beginning	End of year		
Assets	of year 1	1	2	3
Current assets:				
Cash	$ 200,000	$ 200,819	$ 198,703	$ 177,949
Receivables	200,000	195,349	194,286	169,792
Raw material	40,000	40,000	40,000	40,000
Work in process	22,500	22,500	22,500	22,500
Finished goods	87,500	87,500	87,500	87,500
	$ 550,000	$ 546,168	$ 542,989	$ 497,741

Fixed assets:				
Plant and equipment (including land, $50,000)	$ 850,000	$ 850,000	$ 850,000	$ 850,000
Less: reserve for depreciation	250,000	314,000	378,000	442,000
	$ 600,000	$ 536,000	$ 472,000	$ 408,000
	$1,150,000	$1,082,168	$1,014,989	$ 905,741
Liabilities and net worth				
Current liabilities:				
Accounts payable	$ 50,000	$ 39,080	$ 46,985	$ 37,481
Funded debt:				
Bonds payable	100,000	84,000	68,000	52,000
	$ 150,000	$ 123,080	$ 114,985	$ 89,481
Net worth:				
Capital stock	$1,000,000	$1,000,000	$1,000,000	$1,000,000
Surplus (deficit)	.....	(40,912)	(99,996)	(183,740)
	$1,000,000	$ 959,088	$ 900,004	$ 816,260
	$1,150,000	$1,082,168	$1,014,989	$ 905,741

The surplus accounts are particularly interesting. Instead of the nice surplus of $166,205 shown in the original statements, a deficit of $183,740 standard dollars is shown, a variation of over 33 per cent. of the true net worth at the end of the third year. In analyzing this variation it is necessary to explain the concept of net dollar balances. The net dollar balance of an enterprise at a given moment of time is the difference between its money-value assets and its money-value liabilities, or in other words, the difference between the assets representing claims to a fixed number of dollars and the liabilities calling for the payment of a given number of dollars. A net dollar debit balance indicates an excess of dollars receivable over dollars payable and is equivalent to a long position in the dollar. A net dollar credit balance indicates an excess of dollars payable over dollars receivable and is equivalent to a short sale of the dollar. At the beginning of the period, the cash and receivables of the Hypothetical Manufacturing Company amounted to $400,000 and its total liabilities to $150,000. The difference of $250,000 was its net dollar debit balance or its

long position in the dollar. At the end of the first year, it was long on dollars to the extent of $325,104, or an average of about $286,000. The shrinkage in the value (purchasing power) of this net dollar balance amounted to $45,712.

It may be argued that this loss is unrealized, which perhaps is true, but it is no more unrealized than that portion of inventory appreciation which corresponds to the change in the general level of prices and, unfortunately, is usually treated as profit. Although the shrinkage of dollar balances has been excluded from the income account, it represents a real decrement in the stockholders' equity. It can not be denied that dollars carried through a period of declining purchasing power have lost part of their power to command economic goods and services. Money balances carried through the German inflation, for example, were totally lost.

In view of the shrinkage in the value of its dollar balances, the dividend policy of the Hypothetical Manufacturing Company seems fantastic. The facts were:

		Standard dollars
Net operating profits		
3 years at $60,000 a year		$180,000
Shrinkage in purchasing power of net dollar balances		
Year 1	$45,712	
" 2	58,284	
" 3	71,744	175,740
Profit available for the payment of dividends without the impairment of real capital		$ 4,260
Dividends paid		
Year 1	$55,200	
" 2	60,800	
" 3	72,000	188,000
Dividends paid out of real capital		$183,740
Per cent. of dividends paid out of capital		97+%

What a contrast to the previous analysis! The one shows that 39 per cent. of the profits were carried to surplus, the other that over 97 per cent. of the dividends were paid out of capital. Does this variation, perchance, explain the insistence upon conservatism among accountants and financiers? Long experience with the rise and fall of the price level has taught them that when prices are changing rapidly accounting reports simply are not to be

trusted. It is recognized, of course, that the Hypothetical Manufacturing Company has maintained its nominal or legal capital and that the directors are not liable for the payment of dividends out of capital, but the fact that the real equity of the stockholders has been impaired is beyond dispute. The economic capital of the enterprise is the value of the assets originally contributed by the stockholders. It is this value which must be maintained in terms of real purchasing power if the stockholders are not to suffer a diminution of their equity.

Even more interesting is a comparison and analysis of the net profits of the company. The earnings per share computed without reference to changes in the purchasing power of the dollar were:

	Earnings per share of capital stock
Year 1	$ 9.11
" 2	13.52
" 3	19.99

Adjusted for all changes in the value of the dollar and expressed in standard dollars the earnings were $6 a share in each of the three years. For comparison, however, these earnings must be restated in current dollars. This may be done by dividing $6 by the average purchasing power of the dollar during each year. The results are shown below.

Earnings per share adjusted for changes in purchasing power of the dollar

Year	Average purchasing power of dollar during year (a)	Earnings per share in standard dollars (b)	Earnings per share expressed in current dollars (b+a)
1	$.9178+	$6.00	$6.54
2	.7573+	6.00	7.92
3	.5966+	6.00	10.06

Compare these results with the unadjusted earnings previously shown. During the third year the earnings per share were $19.99, if computed in the usual way, as compared to a maximum of $10.06 after proper adjustments. If the stock is worth 10 times earnings it would sell on the one basis at $200, on the other, at $100. Of course, an error of a mere 100 per cent. in pricing a stock issue is not uncommon, but how can the markets be expected to show any degree of sanity if the reported profits are regularly overstated

in periods of optimism and as regularly understated in periods of depression?

A further fact is at once apparent. If the shrinkage in the purchasing power of net dollar balances be deducted from income, the operations of the third year resulted in a loss of $1.97 per share rather than a gain of $19.99.

An analysis of the variations in net profit is enlightening.

Analysis of variations in net profit

	Year		
	1	2	3
Net profit computed without reference to changes in purchasing power	$91,126	$135,204	$199,875
Net profit adjusted for changes in purchasing power ($60,000+average purchasing power of the dollar)	65,372	79,222	100,560
Total variation in net profit	$25,754	$ 55,982	$ 99,315
Variation due to:			
Unrealized or fictitious appreciation of inventories	$20,022	$ 35,479	$ 56,050
Under-depreciation	5,732	20,503	43,265
	$25,754	$ 55,982	$ 99,315

The overstatement of net profit is explained by two factors of which the more important is inventory appreciation. This is rather surprising in view of the well established principle of accounting that appreciation must be excluded from income. The insidious way in which it evades the watchful eyes of the accountants and steals into the income account requires careful explanation. At the beginning, two types of so-called appreciation must be distinguished—the one real, the other fictitious. Real appreciation occurs when the value of a given quantity of goods rises more rapidly than the value of the dollar falls. The apparent appreciation which occurs when the value of the given quantity of goods rises exactly in inverse proportion to the fall in the purchasing power of the dollar is, of course, fictitious. There is no true increase in economic value. Only the unit of measurement has shrunk. For example, if the value of an inventory of 1,000 units rises from $1,000 to $2,000 while the dollar falls to 60¢ the apparent appreciation is $1,000, the real appreciation is $1,000 minus $667 or $333, the amount not due to the fall in the value of the dollar.

If the one thousand units in the inventory are simply held throughout the whole period, the entire $1,000 of appreciation is unrealized and will therefore not appear in the income account as usually prepared. If, however, the inventory is sold and replaced frequently, both forms of appreciation will by the ordinary methods of accounting be taken up as profit. A strictly accurate statement would be, therefore, that fictitious appreciation rather than unrealized appreciation has been treated as profit. The point as to whether the fictitious appreciation is realized or not hardly merits discussion.

It will be recalled that the inventories of the Hypothetical Manufacturing Company were absolutely constant in physical volume throughout the period and that the prices of goods bought and sold varied inversely with every change in the value of the dollar. In the circumstances, there could be no true appreciation in terms of purchasing power. The increases in the inventories, therefore, simply measured the fall in the purchasing power of the dollar. These increases were by no stretch of the imagination realized profits.

The point, since it is so necessary to an understanding of possibly the most important cause for fluctuations in industrial profits, can perhaps be clarified by a simple illustration. An enterprise buys 1,000 articles of merchandise for $10,000 when the dollar is worth 100 cents. After the dollar has fallen to 90 cents, 1,000 articles are sold at $15 each and other 1,000 units are bought at $11,111. What was the profit? An ordinary statement would show:

Sales		$15,000
Cost of goods sold		
Opening inventory	$10,000	
Purchases	11,111	
	$21,111	
Less: closing inventory	11,111	10,000
Gross profit		$ 5,000

The correct profit in terms of 90¢ dollars was $5,000−$1,111 or $3,889. The error is not due, however, to the apparent appreciation in the closing inventory, the value of which is both added and subtracted, and therefore cancels out. It was the opening inventory, not the closing inventory, which appreciated in terms of 90¢

dollars, and the failure to recognize this so-called appreciation, which was really dollar depreciation, permitted it to filter unnoticed into the income account. Although the change in value resulting from the 10 per cent. shrinkage of the dollar applied in fact to the opening inventory, it was first recognized in the closing inventory. This lag explains the overstatement of profits in periods of rising prices. Likewise it explains the understatement of profits in periods of falling prices.

The second factor which accounts in part for the variation in net profit is inadequate depreciation. Even though the plant in the illustration is large and the rate of depreciation high, this factor is not as large as the inventory factor. In the third year, however, under-depreciation causes an overstatement of $4.33 in the earnings per share, an amount which is far from negligible.

The amount of under-depreciation is computed on the theory that depreciation charges over the life of a fixed asset should provide for the recovery of its original cost in terms of real purchasing power. This is not a replacement theory of depreciation; it is strictly a cost basis with cost defined in terms of purchasing power rather than fluctuating and uncertain dollars. The results in practice might closely approximate those obtained by basing depreciation on replacement costs, but this would not be true in all cases. The correct determination of profit, it is generally held, requires that depreciation be based on cost. If cost is defined in terms of purchasing power, the annual depreciation charges will vary inversely with the rise and fall in the value of the dollar, regardless of the movement of replacement or reproduction costs.

The depreciable property of the Hypothetical Manufacturing Company cost 800,000 standard dollars, i. e. dollars of 100 per cent. purchasing power. Depreciation was charged at the rate of 8 per cent. or $64,000 a year. The purchasing power of the dollar, however, was only $.9178 during the first year, and as a result less than 8 per cent. of the original cost was actually recovered. In order to insure the recovery of the equivalent of 64,000 dollars of the standard or base year, $69,732 (64,000 ÷ .9178) of depreciation should have been charged to cost. Likewise in the other years the formula for computing the amount of under-depreciation is $\frac{64{,}000}{\text{Average purchasing power of dollar}} - 64{,}000.$

Although this subject is admittedly a controversial one, the underlying economic facts seem clear. It can not be denied that

an enterprise which recovers less than the purchasing power originally invested in plant currently consumed in service is depleting its real capital. It is true that the full amount may be recovered and kept in the business by building up surplus or reserves for contingencies, but there would seem to be no advantage in the use of erroneous and misleading labels. The simple fact is that either purchasing power equivalent to that consumed in service must be recovered and kept in the business or the capital of the enterprise must be depleted.

From this analysis, it is apparent that the net profits of the Hypothetical Manufacturing Company were materially overstated during each year of rising prices as the result of two factors: unrealized or more accurately fictitious appreciation of inventories and under-depreciation. As a result the earnings per share for the three years were overstated by $2.58, $5.60 and $9.93 respectively. The fact that profits are overstated in periods of rising prices is rather generally recognized. It is often assumed, however, that over a period of years the law of averages may be depended upon to produce substantially accurate results and that adjustments for changes in purchasing power may be safely neglected. The fact is, of course, that the law of averages does not apply. It could apply only on the assumption that the values of each monetary unit fluctuate around a fixed base. Recent world conditions have shown that currencies may lose their fixed base entirely or move up or down to a substantially different base. There is no reason to expect the franc or the lira to return to their pre-war values, and such a return of the ruble or the former German mark is manifestly impossible. It should be apparent, however, that even if a currency does fluctuate around a fixed base, the adjustments can not properly be neglected. Business policies must be formed in the light of current reports and conditions. They can not await the completion of a cycle. And the losses from unwise policies adopted because of misleading current reports can not be recouped even if the statements are substantially accurate on the average.

In order to show the effects of falling prices the statements of the Hypothetical Manufacturing Company have been projected through three additional years during which the purchasing power of the dollar rises from $.52 to $1.00 at the rate of 4¢ per quarter. Conversely, prices fall from 192 at the end of the third year to 100 at the end of the sixth. Physical volume is again assumed to

remain constant at the same level as during the first three years. Since no replacements of plant were made during the first three years, these are assumed now to be necessary. Accordingly, one fourth of the old plant, $200,000, is charged off against the reserve for depreciation, and new equipment of equal capacity is installed at a cost of $384,615. Since this occurs at the beginning of the fourth year when the purchasing power of the dollar is $.52, the cost in standard dollars is $200,000, the same as the original cost of the old equipment.

The statements of the Hypothetical Manufacturing Company prepared without reference to the increasing value of the dollar follow:

HYPOTHETICAL MANUFACTURING COMPANY

Profit-and-loss statements

	Year		
	4	5	6
Sales	$1,340,809	$1,056,296	$ 871,628
Cost of goods sold	943,128	776,072	647,587
Gross profit	$ 397,681	$ 280,224	$ 224,041
Selling and general expense	301,682	237,667	196,116
Net profit	$ 95,999	$ 42,557	$ 27,925

Surplus account

	Year		
	4	5	6
Balance at beginning of year	$ 166,205	$ 202,204	$ 204,761
Net profit for year	95,999	42,557	27,925
	$ 262,204	$ 244,761	$ 232,686
Dividends paid	60,000	40,000	30,000
Balance at end of year	$ 202,204	$ 204,761	$ 202,686

HYPOTHETICAL MANUFACTURING COMPANY

Comparative balance-sheet

	At end of year		
Assets	4	5	6
Current assets:			
Cash	$ 335,385	$ 435,385	$ 438,693
Receivables	267,332	323,628	200,000
Raw materials	60,606	48,780	40,816
Work in process	34,500	28,087	23,814
Finished goods	133,388	109,227	93,055
	$ 831,211	$ 945,107	$ 796,378

Fixed assets:			
Plant and equipment (including land, $50,000)	$1,034,615	$1,034,615	$1,034,615
Less: reserve for dep'n	320,769	399,538	477,308
	$ 713,846	$ 635,077	$ 556,308
	$1,545,057	$1,580,184	$1,352,686
Liabilities and net worth			
Current liabilities:			
Accounts payable	$ 42,853	$ 75,423	$ 50,000
Funded debt:			
Bonds payable	300,000	300,000	100,000
	$ 342,853	$ 375,423	$ 150,000
Net worth:			
Capital stock	$1,000,000	$1,000,000	$1,000,000
Surplus	202,204	204,761	202,686
	$1,202,204	$1,204,761	$1,202,686
	$1,545,057	$1,580,184	$1,352,686

Inventories in the above statements have been valued at cost, although cost was higher than market, in order to make them consistent with the statements of the first three years. They may be stated at market by making appropriate adjustments to surplus and establishing a reserve for inventories in the following amounts:

	End of year		
	4	5	6
Reserve for inventories	$ 7,906	$ 7,523	$ 7,685

The net profits adjusted for the declines in inventory would be as follows:

	Year		
	4	5	6
Net profits per statement	$95,999	$42,557	$27,925
Inventory adjustments	7,906	(383)	162
Net profits adjusted for market declines in inventories	$88,093	$42,940	$27,763

The same statements adjusted for the rise in the purchasing power of the dollar and expressed in standard dollars are given below. Since the profit-and-loss statement is identical with that for the first three years, it is omitted.

HYPOTHETICAL MANUFACTURING COMPANY

Comparative balance-sheets expressed in standard dollars

	At end of year		
Assets	4	5	6
Current assets:			
Cash	$ 228,062	$ 365,723	$ 438,693
Receivables	181,786	271,847	200,000
Raw materials	40,000	40,000	40,000
Work in process	22,500	22,500	22,500
Finished goods	87,500	87,500	87,500
	$ 559,848	$ 787,570	$ 788,693
Fixed assets:			
Plant and equipment (including land, $50,000)	$ 850,000	$ 850,000	$ 850,000
Less: reserve for depreciation	306,000	370,000	434,000
	$ 544,000	$ 480,000	$ 416,000
	$1,103,848	$1,267,570	$1,204,693
Liabilities and net worth			
Current liabilities:			
Accounts payable	$ 29,140	$ 63,355	$ 50,000
Funded debt:			
Bonds payable	204,000	252,000	100,000
	$ 233,140	$ 315,355	$ 150,000
Net worth:			
Capital stock	$1,000,000	$1,000,000	$1,000,000
Surplus (deficit)	(129,292)	(47,785)	54,693
	$ 870,708	$ 952,215	$1,054,693
	$1,103,848	$1,267,570	$1,204,693

Surplus account computed and expressed in standard dollars

	Year		
	4	5	6
Surplus (deficit) at beginning of year	$(183,740)	$(129,292)	$(47,785)

Add:			
Net profit for year	$ 60,000	$ 60,000	$ 60,000
Gain in purchasing power of net dollar balances	30,448	51,907	70,078
Total gains	$ 90,448	$111,907	$130,078
	$(93,292)	$(17,385)	$ 82,293
Deduct:			
Dividends paid	36,000	30,400	27,600
Surplus (deficit) at end of year	$(129,292)	$(47,785)	$ 54,693

The net profits computed in different ways may now be listed and compared.

Comparison of net profits computed by different methods

	Year		
	4	5	6
A. Net profits adjusted for changes in purchasing power and expressed in:			
1. Standard dollars	$ 60,000	$ 60,000	$ 60,000
2. Current dollars of each year	100,560	79,222	65,372
B. Net profits computed without reference to purchasing power			
1. Inventories at cost	$ 95,999	$ 42,557	$ 27,925
2. Inventories at market	88,093	42,940	27,763

Of this variety of methods and results, numbers A2 and B1 may be most readily compared. An analysis of the variations follows:

Analysis of variations in net profit

	Year		
	4	5	6
Net profits (expressed in current dollars):			
Adjusted for rise in purchasing power of dollar	$100,560	$ 79,222	$ 65,372
Computed by customary methods	95,999	42,557	27,925
Understatement	$ 4,561	$ 36,665	$ 37,447
Variation due to:			
Unrealized or fictitious inventory losses	$ 33,057	$ 42,400	$ 28,409
Under-depreciation	28,496	5,735	
Over-depreciation			9,038
	$ 4,561	$ 36,665	$ 37,447

Inventory valuations are still the most important cause of variations in net profit. If inventories during the last three years of the hypothetical illustration are valued at cost or market, whichever is lower, the unrealized appreciation of the first three years is exactly offset by the unrealized losses of the last three. But what enormous errors are introduced into the intervening statements! The over-depreciation which appears in the sixth year results from the high money valuation of the plant replacements made at the beginning of the fourth year.

Pity the poor stockholder of the Hypothetical Manufacturing Company! He has seen his profits rise to $20 a share and then fall abruptly to less than one-seventh of this amount. His dividends have been reduced from a maximum of 12 to 3 per cent. The market has fallen and discouragement is in the air. But let us analyze the situation to see how he has fared in terms of purchasing power. During the three years of prosperity the total profits of the enterprise barely exceeded the loss on net dollar balances, leaving, as previously explained, an increment of only $4,260 in favor of the stockholder, less than fifteen one-hundredths of one per cent. a year! In the succeeding period of gloom, however, the situation was as follows:

Adjusted net profits		
3 years @ $60,000		$180,000
Gain in purchasing power of net dollar balances		
Year 4	$30,448	
" 5	51,907	
" 6	70,078	152,433
Stockholders' total increment		$332,433

In other words, during the period of depression the stockholders' real economic wealth, measured in the power to command goods and services, increased at an average rate of over 13½ per cent. on the net worth of the stock at the beginning of the fourth year. His total gain during those hard years of falling prices was almost eighty times as great as it was during the corresponding period of apparent prosperity!

This seemingly impossible result may as a matter of fact be quite simply explained. The capital of the corporation consisted of real wealth, land, plant, raw materials, finished goods, on the one hand, and net dollar balances, the excess of dollars receivable over dollars payable, on the other. Now the inherent usefulness

of the real wealth and its relative value in goods and services were not affected by the changes in the value of money. Both the gains and losses on such property were therefore apparent only and not real. There was, however, a real shrinkage of the value of net dollar balances as the purchasing power fell and a real gain as it rose. In the financial reports prepared in the usual manner during the first period, fictitious profits were shown and genuine though not necessarily "realized" losses neglected, while in the latter period fictitious losses were reported and real gains omitted. Since the physical volume of business was constant, is it at all strange that the stockholders were really better off in the period of so-called depression than during the boom?

Naturally, this does not imply that corporations as a general rule are more profitable during depressions than at other times. If the debts of the Hypothetical Manufacturing Company had far exceeded its dollar balances of cash and receivables, it might well have been thrown into bankruptcy as a result of the fall in prices. A goodly number of our strongest corporations, however, are affected by price level changes in much the same way as was the Hypothetical Manufacturing Company. They have large dollar balances and they may have a fairly constant physical volume of business. For such companies particularly the customary methods of computing net profits give misleading results. There can be no doubt that the overstatement of profit when prices are rising and the understatement of profit when prices are falling act as powerful forces tending to increase the severity of booms and depressions.

The influence of changes in purchasing power has many ramifications beyond the computation of earnings per share and the determination of financial policies. It applies with special force to price policies generally. A period of depression is always characterized by price-cutting, which is supposed to be, and may actually become, ruinous. Strenuous efforts, therefore, are made by single enterprises and by whole industries to maintain price scales. It should be apparent, however, that price maintenance in such circumstances produces an actual increase of prices in terms of purchasing power at just the time when economic conditions call for price reductions. By forcing real prices upward the volume of business is drastically reduced and a basis laid for the ruinous price-cutting which almost inevitably follows. Such problems would be automatically solved in large measure by the per-

manent stabilization of the purchasing power of the dollar, but until that is accomplished a consciousness of the changes in purchasing power and their effects should enable the managements of business enterprises to avoid most of the disastrous effects.

The shrinkage of net dollar balances, for example, can by careful management be largely avoided. A number of businesses hedge their foreign exchange commitments in order to avoid taking a speculative position. It is likewise possible to hedge their position in the dollar. The company which so arranges its financial plan that its debt is equal to its dollar balances receivable has a perfect hedge on the dollar. Such a hedge may be much more important than a hedge in foreign exchange, since the amounts involved are apt to be larger. The present national administration has pledged itself to raise prices to the 1926 level and laws have been passed which permit, if they do not compel, an increase far above that level. American corporations with large dollar balances are, therefore, particularly vulnerable to a shrinkage of dollar values. They are taking a long position on the dollar, a "commodity" which under existing conditions is peculiarly speculative. Positions in wheat, cotton and silver are regarded as extremely speculative and are avoided by most business concerns. Yet the supply of these commodities is governed by natural laws which definitely limit the quantity which can be made available at a given time. It is hardly conceivable that such commodities should ever become worthless. The dollar, however, can be multiplied, or, more accurately, divided without limit by political action at any time. It could conceivably become as worthless as the German paper mark. Yet many companies do not hesitate to take a long position on the dollar to the extent of many millions.

A continuation of this analysis, however, would take us far beyond the limits of this paper. The implications of a concept of value expressed in units of fixed purchasing power, which we have called standard dollars, are so numerous as to require volumes for adequate treatment. It applies not only to domestic enterprises but to foreign branches and subsidiaries as well. Corporations with extensive operations abroad have in recent years simply been unable to determine their profits or their position. They could have done so with reasonable accuracy if the accounts of both foreign and domestic branches had been converted into fixed value units. The one point, however, which this paper seeks to

emphasize is that changes in the purchasing power of monetary units are significant and that such changes must be taken into account if an intelligent understanding of the affairs of a business enterprise, either domestic or foreign, is to be obtained during periods of rapidly changing prices.

Finally, there are two conclusions which must be stated:—

First, the formal or legal accounts with rare exceptions should be kept on the basis of historical cost. Otherwise confusion reigns. Revaluations, write-ups, write-downs and the like unnecessarily complicate the records without solving the problems of valuation. The accounts, however, should be kept in such a way as to facilitate analysis in terms of purchasing power. Property accounts, for instance, which provide the information required by T. D. 4422 can be readily converted into standard dollars.

Second, financial statements which disregard significant changes in the monetary unit in which they are expressed are of doubtful value and at times grossly misleading not only to the public but to the management as well. It will be urged that the idea of restating financial statements in terms of dollars of uniform purchasing power is highly theoretical, impractical, costly to apply and outside the province of practical men. Such objections can be sustained, however, only by proving one of the following propositions:

1. That the purchasing power of the dollar will not change (though it has changed almost constantly in the past);
2. That the number of monetary units is more significant than their purchasing power; or,
3. That the value of correct information is not equal to the cost of obtaining it.

While it is hoped that the dollar will be stable in the future, the lessons of history are against it. The idea that real purchasing power is less significant than the number of monetary units is so palpably false as to merit no further argument. The additional bookkeeping and clerical cost involved in making adjustments for changes in purchasing power are more indefinite. It can not be denied that the installation of a system of stabilized accounting, as it has been called by Sweeney, Castenholz and other writers, would be difficult for a corporation with many properties and inadequate plant records. In some cases an appraisal might be necessary. There is reason to believe, however, that once the new system were installed, its operation would be relatively in-

expensive. Its cost would certainly be less than that of some elaborate systems of standard costs which attempt to provide more stable criteria by which factory executives may judge their work. Whatever the cost of the new system, however, it could hardly exceed the incalculable costs arising from reliance on biased and inaccurate information at critical periods of economic adjustment.

Balance-Sheets of Promotional Enterprises

By C. Aubrey Smith

If one search the literature of the accounting profession he will find little to guide him in passing judgment on balance-sheet content and practice, as it is exemplified in balance-sheets of companies prior to operation where the company has acquired or is to acquire, for the company's capital stock, property the value of which has not been proven. Companies organized to acquire and exploit properties such as mining leases and options, patents, prospective oil deposits, chemical formulæ, manufacturing rights and the like are cases in point.

The procedure in most of these cases is substantially the same. There is someone who has conceived the idea of developing such property, usually a person of the promoter type, who, perhaps with an associate or two, acquires the property for a nominal price and then organizes a corporation and transfers the property to the corporation for a substantial block of the stock, or one who has the stock issued direct to the original owner of the property and receives stock for his promotional activities, after which the company proceeds to sell stock to the public on the basis of a prospectus which includes a balance-sheet giving effect to these transactions. The question which arises is: Does such a balance-sheet display a true picture of the financial condition of the company to prospective investors? In fact, does a balance-sheet as of this given date have any significance whatever to interested parties where stock has been issued for the properties in question and also for promotion services?

The corporate balance-sheet is generally understood to include the assets, liabilities and capital of a going concern at a given time. It is taken for granted by prospective stockholders that the various items shown as assets have asset value, either convertible through operations immediately or at some time in the future. But is this necessarily true of balance-sheets of promotional enterprises where the values placed on the properties are generally set by the board of directors, who may place such a value on the property acquired or to be acquired so as to permit the promoter to have control of the corporation without giving particular attention to the true worth of such property acquired

from him? Manifestly inflated values naturally arise from this treatment.

A typical case is that of a company which will be designated as the Paymore Mining Corporation. The balance-sheet of this company at December 31, 1934, reads as follows:

PAYMORE MINING CORPORATION
Balance-sheet, December 31, 1934

Assets

Properties—consisting of 500 acres of patented and unpatented mining claims in Elko County, Idaho, valued by the board of directors at par value of stock issued for contract rights	$1,020,000
Organization expense	750
Total assets	$1,020,750

Liabilities

Current liabilities	
Due Mr. X for advances and expenses of organization	$ 750
Capital stock	
Authorized 2,000,000 shares of $1 par value Issued 1,020,000 shares	1,020,000
Total liabilities and capital	$1,020,750

It is proposed to issue the remaining 980,000 shares to the public at $1 a share. Upon investigation it is discovered that this company was organized by Mr. X, to whom the 1,020,000 shares of stock were issued in return for his assignment to the corporation of his rights in the leases and options. It is further discovered that Mr. X had made a cash outlay of only $3,500 to acquire the lease and option agreements, which provided for payment of $250,000 in cash over a period of four years to acquire title and payment of 15 per cent. of the gross proceeds from the property as long as operated by the Paymore Mining Corporation.

In general there have been several sets of criteria or rules which accountants follow in preparing and certifying balance-sheets for this type of enterprise. These may be referred to as:

1. The "good faith" rule,
2. The "true value" rule,
3. The "market value" rule,
4. The "nominal value" rule.

The legal decisions of most states follow the "good faith" rule. Under this rule a valuation placed upon an asset by the board of

directors for stock issued for such an asset will not be impeached if the evidence shows that the directors had no positive grounds for believing their estimate to be erroneous. Under this principle bad faith must be proved. Bad faith consists in deliberately (i. e. with knowledge) over-valuing the consideration accepted for stock. Mere mistake or error in judgment on the part of the directors is not sufficient under this rule to vacate their valuation. It must be shown that the directors knew that their valuation was excessive. The "good faith" rule is manifestly faulty, both in theory and practice, since it makes good faith a criterion for establishing value. It is erroneous in theory since directors may be entirely sincere and honest in their opinion that a property has prospective value of a given amount, but as such value is dependent upon future circumstances and contingencies which may never arise, the effect is to give present tangible dollar value to something which is at present only a prospect. It is faulty in practice because the basis for establishing "good faith" value is usually a more or less arbitrary amount of stock issued for the property. The net effect of the situation is to put the cart before the horse. Capital stock reflects value, it does not impute value. The value of the property acquired in exchange for securities determines the worth of the stock, not vice versa. It is indeed absurd to say that, because a million dollars of capital stock was issued for a mining claim or patent, this mining claim or patent is now worth or will ever be worth a million dollars. It may eventually realize more, but then again it may be found to be worthless. But to say that a company owns property worth a million dollars (and that is what the balance-sheet purports to show) when all that has been done is to make a bookkeeping entry is to constitute the balance-sheet a vehicle for legal fiction rather than financial fact. That this is not merely an academic question is proven from a study of many registration statements of this type of enterprise registered with the securities and exchange commission. Many of these registration statements clearly show the promoters to be anything but timid in setting up inordinately high values for property in exchange for capital stock, and these values are entirely out of harmony with the cash cost to the promoters. We can justly be concerned over the appearance of these large values in balance-sheets because "the symmetry and balance of published statements have led to a popular impression that the figures contained in them are matters of final and undisputed

fact to a greater degree than is warranted by circumstances." (*Report to Stockholders*, department of commerce, page 3.)

The "true value," in the absence of cash or cash equivalent consideration, is predicated on the assumption that there is available a satisfactory body of information from which it can be deduced what the fair and reasonable value would be in the given circumstances. True value may be tested by what persons independent of the organization would pay for the properties. The true value of a going concern can obviously be tested in the light of past operating history and the market value of its securities, assuming an uncontrolled market. With a company just beginning business, however, no such operating history is available. It has been suggested that true value may be obtained from an independent appraisal of the properties. Manifestly where the property values are obtained by scientific engineering technique and upon honest unbiased data intelligently interpreted, little fault can be found with this method of valuation, and balance-sheets based upon such values are highly significant. Unfortunately, however, if the experience of the securities and exchange commission in stop-order hearings is any indication, many appraisals of speculative and unproven properties filed with this commission are untrustworthy in proving a present property value. This may be due in part to the incompetence of the appraisers, but it is apt to be due to the fact that the assets of many promotional ventures can not be valued scientifically. It may be questioned whether anyone, regardless of his ability or training, is able to place a reasonably accurate present value on a wholly undeveloped project, be it a mine, patent or formula. Many eminent mining experts are of the opinion that it is not feasible to attempt to place an accurate present value on a mining property in the early stages of development. The value of a new patent, formula or manufacturing right is so dependent upon the market reception of the product that it appears unreasonable to attempt to value such an intangible before determining the actual marketability of the product.

The basis of the "market value" rule is that the value of the company's capital stock sold contemporaneous with or subsequent to taking over the property to be developed reflects the value of the property for which the company's shares are to be issued. In the words of H. A. Finney, "If some of a company's stock or bonds are sold for cash, the cash price establishes the

value of the securities, and, hence the value of any fixed assets acquired by the issue of similar securities at approximately the same price." One can hardly deny that this method can be applied satisfactorily to valuing company property where there is a free and unrestricted market. However, the fact that a company not yet in the operating stage contemplates selling its stock at a certain price or that an underwriter has agreed to take a certain number of shares at a given price would not be a satisfactory basis for assigning an equivalent share value to the property acquired. Valuation of property at the cash value of shares issued for such property gives effect to an outside element, i. e. what independent persons are willing to pay for stock in the company; but such valuation is essentially dependent upon the directors' original valuation. This method is fundamentally unsound and illogical and may be dismissed as an unsatisfactory method of valuing property of promotional enterprises, because in promotional ventures there can be no free and open market for the shares. Furthermore, this method, like the "good faith" method, seeks to establish the value of property by looking to the equity accounts.

The followers of the "nominal value" rule argue that because of the difficulties inherent in the valuation of property which has not yet been proven the proper attitude to take should be that of ultra-conservatism and that where property, the value of which is prospective, is to be exchanged for stock, the value to be placed on such property should be a nominal value such as $1, $10 or $100. A balance-sheet prepared on this principle would be somewhat as follows:

MEXICAN STANDARD GOLD MINES CORPORATION
Balance-sheet, March 31, 1935

Assets

Cash in bank		$ 1,427.28
Fixed assets		
Lease and option for purposes of this balance-sheet	$ 1.00	
Cost of development to predecessors prior to acquisition by issuer	38,563.02	
Cost of development subsequent to acquisition	14,228.04	
Machinery and equipment at cost to predecessor company	4,962.80	57,754.86
Organization expense		8,643.74
Total assets		$67,825.88

Liabilities and capital

Liabilities		
Current wages	$ 522.00	
Current accounts payable	563.32	
Accrued taxes	270.00	
Cash advanced by stockholders	22,943.74	$24,299.06
Capital stock		
Authorized and issued fully paid for the lease and option	1,500,000 shares	
Less: stock donated to treasury	300,000 shares	
Outstanding, 1,200,000 shares of par value $1 each	$1,200,000.00	
Less: adjustment for purposes of this balance-sheet on account of carrying value of lease and option at nominal value of $1	1,156,473.18	
Net capital as adjusted		$43,526.82
Total liabilities and capital		$67,825.88

Such a policy as is reflected in the foregoing balance-sheet appears to be decidedly arbitrary, may be positively unfair to the issuing company and is apt to provoke endless controversy between the accountant and the client. While an issuer may not be able to prove a particular value for his property, there may be evidence of indeterminate value. Even though it may be agreed that there is no basis for a definite statement of value, it appears inaccurate, non-informative and unfair to compel the use of a nominal value. While a high value may influence some investors to buy, it is equally true that a nominal value may cause a prospective investor to become unwarrantably suspicious.

Is it not significant that practically all stop-orders issued by the securities and exchange commission to date involving promotional ventures have cited deficiencies on the balance-sheet? It may also be remarked in passing that very few registrations involving promotional ventures become effective with the commission without having to be amended one or more times. It would appear, therefore, that the present form A-1, which requires that the registrant furnish a balance-sheet, gives rise to an unsatisfactory statement of material fact. Being confronted with the necessity of placing a dollar valuation on his property, the registrant has usually adopted one of the valuation bases set forth above. In theory at least, the securities and exchange

commission has adopted a fifth method, i. e. the method of full disclosure which is based on the principle that irrespective of the methods employed to set the value of properties acquired, so long as full complete statements of the methods of valuation are contiguous to the respective items in the balance-sheet the investor will not be tricked or misled into buying something which on its face may or may not represent value. As an illustration note the following taken from the balance-sheet of a registrant with the commission:

"*Manufacturing rights*..... $283,837.44

"The value of these manufacturing rights was fixed by members of the board of directors informally in 1933, after wind tunnel tests of a model plane in New York and long before the four-place 'Crusader' was built. Therefore, the figure given was, and still is, unliquidated, speculative and was adopted for necessary accountancy purposes only, to make stock fully paid and non-assessable, and for computing the tax required by the internal revenue department. The investor can not rely upon this figure in calculating the worth of this investment."

We may agree that the principle is sound as a general proposition but that in its application to the formal balance-sheet of promotional ventures it is unsound since even the balance-sheet of this type of enterprise purports to reflect present values at a given time. As such values may be only prospective and not subject to accurate valuation principles, the effect, even in the face of full disclosure, is to make the balance-sheet reflect a future value based on merely a pious hope rather than on financial fact. This anomalous situation can be relieved by making full disclosure without having to corrupt the formal balance-sheet which should reflect fact and not conjecture.

In the light of the above difficulties attendant upon showing formal balance-sheets for promotional enterprises, the following practice is suggested:

1. That a formal balance-sheet be not required by corporations in the promotional stage of development where an unbiased scientific appraisal of property acquired or to be acquired has not been made or where cash or cash value costs are not applicable.
2. That in lieu of the formal balance-sheet a textual or tabular statement of financial condition be set out consisting of the following:
   A. A description of the particular assets the exploitation of which is to comprise the business of the registrant and all other major properties, if any, owned by the issuer. In each case the nature of the ownership, i. e. patented claims,

unpatented claims, lease, license, formula or manufacturing right should be indicated.

B. Schedules of current assets and deferred charges and all liabilities properly classified as current, fixed or contingent, naming all affiliated companies or persons to whom debts are owed. A statement concerning all royalty payments should be made.

C. A schedule of capital stock containing the following information:
   1. Number of shares authorized.
   2. Number of shares outstanding.
   3. Number of shares in treasury.
   4. Number of shares issued to promoters for property and services.
   5. Number of shares issued to persons other than promoters for property and services.
   6. The cost per share of stock to directors, officers and promoters and the cost per share to public.

D. A statement of percentages of stock issued to promoters for property or services to the total stock to be presently outstanding on completion of the proposed financing. If more than one class of stock is outstanding, the percentage of total profits accruing to promoters as a result of their stock ownership should be stated.

E. A statement of cash receipts and disbursements, by years, from the date of organization.

F. Certification of these facts by a public accountant.

It is believed that this procedure will result in giving the investor full historical information concerning the financial data of the company, without giving rise to misleading statements of financial condition, will eliminate the necessity for making valuation experts of employees of the securities and exchange commission, will relieve the public accountant of having to except questionable values from his certificate, will free the balance-sheet from giving effect to values which are not proven and can not be proven in the light of the given circumstances, and will set out the significant financial information in such form as to make it understandable to the general reader.

Reserves for Depreciation and Inflation

By Henry Varay

A problem of growing importance to accountants under modern business and financial conditions is vested in the setting up of reserves for depreciation from the annual profits of their clients. Every machine now in use will have to be replaced at some time in the future. From some source money will have to be provided in sufficient amount to meet the cost of the machine at that time. And no one may say how much money—how many dollars—will be needed to cover the cost of new equipment twenty to twenty-five years hence.

Most corporations fail to provide sinking funds for such contingencies. The general practice is to invest surplus earnings in marketable securities without earmarking them for specific uses. When the necessity arises to discard machinery on account of depreciation or obsolescence, sufficient securities are sold to cover the bill. These securities are held as a reserve against any future necessity. In other cases, where surplus funds have not been invested in such marketable securities, additional capital must be obtained. Fancy the predicament of the manufacturer in 1932, when he was to replace an important machine owing to wear and tear or obsolescence. He, too, invested surplus funds during the years of lucrative business, but now in 1932 the value of his securities was only 20 per cent. of his cost. How was he to replace the machine?

The accountant is faced with problems of this type. His client consults him to provide or acquire the necessary funds. How is the accountant to advise his client?

Before the query can be answered, the accountant has to face a further apprehension. What about inflation? What will be the buying power of the reserve for depreciation to replace machinery if, when the time comes to replace it, inflation is at our threshold?

It is obvious, from the foregoing, that the old method of laissez faire in the funding of depreciation reserves must be abandoned. The vigilant accountant must think of something new.

Now suppose the accountant advises his client to invest, periodically (monthly, semi-annually or annually), the amounts set aside for depreciation and obsolescence. It goes without saying

that the best results from such a method would be obtained if a definite program were followed—a plan involving not only conservative investment advice, but also a system for making the money work as profitably as the safety of the principal permits. It is possible that neither the accountant nor the client would feel competent to lay out a program including the selection of securities. The advice of specialists could be secured, of course, but something more valuable would be an investment method, ready made, and the machinery for applying it. Is there any such method?

Yes, there is. The investment procedure consists of buying selected equity securities periodically, with the same amounts of money always invested on the periodic dates.

The program is simplicity itself, mere elementary mathematics. Investment organizations found that when an investment campaign was carried on over a lengthy period, the buyer acquired relatively few shares when prices were high and many more shares when prices were low. That was because he always used the same amount of money. Fire-insurance companies have unconsciously followed this method for decades. Thus, $1,000 invested monthly during the period September, 1929, to December, 1934, in stocks composing the Dow-Jones industrial averages, was at an average price of 101.72, although some purchases were made as high as 381.17 in the boom! The same amount of money that bought only three shares at the peak, purchases twenty-three shares in the trough of the market slump. All the way down from the boom peak, the $1,000 a month was paying for more and more shares. When only a slight improvement came along after the worst of the decline, the investor quickly had a profit on all of his purchases, inasmuch as the upturn had its greatest effect upon the many shares bought in the lower reaches of the slump.

Purchases made in 1901 of one share each of the stocks used by Dow-Jones industrial averages produced by 1934 an accretion of 5.2 per cent. compounded annually, plus an annual income of 6 per cent. calculated by the value of the principal at the end of each year. These figures take into consideration the revisions made from time to time by Dow Jones & Co. Furthermore, the declaration of stock dividends, issuance of rights and stock split-ups are also considered. At this juncture, it should be borne in mind that from 1901 to 1934 every conceivable economic disturbance, war prosperity, depressions (a number of them) occurred. To be sure, the period was representative.

There are companies operating funds in which the public participates through periodic investments of equal amounts. While I am not in position to pass upon the merits of investment organizations of this kind, still, they do provide the machinery to carry out a program adaptable to depreciation accounts of corporations.

The method described above offers a significant study to the accountant. Assume that the accountant had advised his client to invest annually (or at other periods) the amount set aside from profits for the addition to the reserve for depreciation. He would find that his client has an appreciation in principal at the end of twenty or twenty-five years, in addition to a satisfactory return on investment. Moreover, the accumulated principal is apt to reflect the current buying power of the dollar. He would have enabled his client to replace machinery at the current buying power. Incidentally, this circumstance also answers the currency inflation problem. Since the sagacious management of the investment fund would have invested preponderantly in equities and moderately in bonds and preferred stocks, it is obvious that, should inflation come, the equities would represent current values in inflated dollars. Hence, the client would then be provided with sufficient dollars to purchase machinery at the prevailing prices at that time.

Distribution Costs

A NEGLECTED FACTOR IN ACCOUNTING

By Harvey A. Andruss

Cost Accounting for Making and Selling Goods

Ascertaining the costs of manufacturing goods has long been an important phase of modern accounting. The factory system with its technological processes has become so complex that actual costs have been displaced to some extent by standard costs. The early availability of cost figures has become a prime necessity of business management. Figures for use in a current month must be available within a few days after the close of the previous month. Otherwise, they are of little value in making administrative decisions.

Standard manufacturing costs have raised the question of finding a similar standard for merchandising operations. Generally speaking, the gross profit for each department is the sole guide in the management of large trading concerns. Promotion or demotion for the salesmen in each department depends on this figure. The expansion or the contraction of the activities of the department depends on gross profit, which is a half truth. Would manufacturing concerns be satisfied with a unit cost found by dividing the number of units produced in any one month into the prime cost (the sum of direct materials and direct labor)? Why should trading concerns content themselves with finding only the departmental gross profit? Why not find the net profit for each trading department using the principles now recognized in the field of cost accounting for manufacturing concerns?

As in manufacturing cost accounting, the crux of the problem lies in the distribution of the indirect expenses among the various departments. May we not follow with some assurance the cost accounting experience of the past? Direct labor is frequently used as the basis for allocation of the indirect expenses if the manufacturing process is one involving a large amount of human effort. Since selling goods demands the services of skilled salesmen, is it not reasonable to assume that the salaries paid to the salesmen in

each department are a valid basis for dividing the other expense among the departments?

The Classification of Factory, Selling and General Expenses

In any phase of business there are expenses or costs which tend to vary with the volume of the productive or selling activity. In times of depression, the factory decreases the amount paid to men in the form of wages, either by lessening the number of men employed or by a lower rate of wages. The trading business does not need as many clerks when the volume of sales begins to drop off, hence they resort to similar methods to decrease the amount of wages or salaries. Direct labor costs and sales salaries tend to grow larger with increased volumes of production or sales and tend to decrease when the volume of business in the factory or the store drops off.

To this type of costs or expenses the name of direct expenses is applied, since they vary in direct proportion to the volume of business. They are frequently referred to as "controllable expense" since they are not fixed by contract or circumstances. The term "variable expenses" is also used. All the descriptive adjectives are used for the purpose of differentiating these expenses from the fixed or indirect expenses which remain about the same no matter what the change in the volume of the business may be.

Rent, heat, light, insurance, taxes and some phases of depreciation are costs which are incurred, no matter whether a wheel in the factory turn or whether a dollar's worth of merchandise be sold. We have long referred to these as "overhead." By using the descriptive words, "factory" or "general," we have recognized that these expenses exist in both the factory and the store. These indirect expenses are referred to as non-controllable or fixed expenses. Either the legal aspects of contracts or other circumstances prevent the changing of the amount of these expenses over any short period of time.

Three Selling Situations

The method here illustrated is the division of selling and general expenses among departments and salesmen using the direct selling costs as direct labor costs are used to distribute factory overhead in the field of manufacturing.

The items included in direct labor selling costs depend on the situation and method of selling in a particular business. If the selling process is carried out:

First assumption

By counter salesmen as in a department store, the basis of allocation may be salaries paid in each department and to each salesman. (Refer to second illustration.)

Second assumption

By traveling salesmen who, in addition to drawing a salary, incur expenses which are borne by the business. The basis should include traveling expenses combined with salary. (Refer to third, fourth and fifth illustrations.)

Third assumption

By office salesmen who incur expenses payable by the business with their salaries (with or without commissions) but occupy office or desk space, as salesmen in investment banking or insurance concerns. Then expenses are shared on the basis of salary, commissions and traveling expenses. (Refer to sixth and seventh illustrations.)

A Traditional Departmental Statement of Profit-and-Loss

The usual type of operating statement made by department stores or any other kind of business having department organization is similar to the first illustration. For the sake of brevity only two departments and small amounts are used in this illustration. The total column serves as a view of the operation of the business as a whole.

First illustration

	Dept. A	%	Dept. B	%	Total	%
Income from sales:						
Sales	$50,000	100.28	$26,000	100.28	$76,000	100.28
Less—sales returns	140	.28	75	.28	215	.28
Net sales	$49,860	100.00	$25,925	100.00	$75,785	100.00
Cost of goods sold	36,500	73.21	20,100	77.53	56,600	74.68
Gross trading profit	$13,360	26.79	$ 5,825	22.47	$19,185	25.32
Operating expenses						
Selling expenses:						
Salaries of sales clerks	$ 6,000					
Other selling expenses	2,500		$ 8,500			

General expenses:				
Office salaries	$ 2,800			
Other general expenses	5,000	$ 7,800		
Total operating expenses			$16,300	21.51
Net profit			$ 2,885	3.81

The dollar sales volume of department B is more than one half that of department A; but, the gross trading profit of department B is less than one half that of department A. This means in effect that the mark-up in the two departments is not uniform. A glance will show that for every dollar's worth of sales made in department B the gross profit is slightly over 22 cents; in department A the gross profit is over 26 cents. This means that each dollar's worth of sales in department A makes 4 cents more than each dollar does in department B. The net profit for the business is 3.8 cents on each dollar of sales. What is the rate of net profit per dollar in each department? Which department is earning more in terms of net profit?

Different Methods of Allocating Selling and General Expenses

The focal point of this discussion is the method of: (1) dividing the selling and general expenses between the departments so as to ascertain the net profit for each department; (2) determining the portion of the departmental net profit for which each salesman is responsible. Thus the productiveness or non-productiveness of each salesman is stated in terms of net profit or loss.

The allocation of factory overhead in a wide variety of ways testifies to the ingenuity of the cost accountant but frequently only serves to puzzle the management. There are probably as many ways of "spreading" selling and general expenses in a trading business.

Two methods are suggested for consideration. In a small undepartmentalized trading business having a uniform mark-up or rate of gross profit the volume of sales in dollars may be taken as the basis. Each salesman will have charged against him his salary and other direct selling costs, such as commissions and travel expenses. In addition, he will share all other expenses in the same relation that his sales quota bears to the total sales for the business.

However, for the large departmentalized business the method here illustrated is based on the direct selling costs. These direct

selling costs include the salary, traveling expenses and commissions of each department or each salesman. The departments share all other selling and general expenses in the same ratio that the direct selling expenses of each department bear to the total direct selling expenses for all departments.

After the direct selling expenses are divided among the departments, the direct selling expenses of each salesman must be carefully scrutinized. Ordinarily the sales manager keeps a record of the salary, commissions and traveling expenses of the individual salesman. He may also keep the actual sales quota of each salesman in terms of dollars. These data are ordinarily kept or are available through office routine or general accounting procedures carried on each fiscal period. The total of the salary, commissions and traveling expenses paid (in each department) is the numerator of a fraction, while the total direct selling expenses paid in all the departments (or for all salesmen) is the denominator. This fraction is multiplied by all other expenses (indirect selling and general expenses) to find the amount to be allocated to each department or salesman. In other words, indirect expenses are allocated on the basis of direct selling costs in a manner parallel to the direct labor cost method used in manufacturing cost accounting.

Departmental Profit-and-Loss Statement (showing net profit)

If the amount paid for sales effort and its supervision in department A is $3,500 and in department B, $2,500, the fraction, $\frac{\$3,500}{\$6,000}$, equals 58.3%, which is the portion of indirect selling expenses and general expenses to be borne by department A. The fraction, $\frac{\$2,500}{\$6,000}$, equals 41.7%, the share of department B in the indirect selling and general overhead. By using these rates the other indirect expenses will be divided as follows:

Second illustration (using first assumption)

	Dept. A 58.3% ($3,500)	Dept. B 41.7% ($2,500)	Total 100% ($6,000)
Other selling expenses	$1,458	$1,042	$2,500
Office salaries	1,632	1,168	2,800
Other general expenses	2,915	2,085	5,000
Total	$6,005	$4,295	$10,000

The effect of such a situation is reflected in the profit-and-loss statement by net loss for department B.

	Dept. A	Dept. B	Total
Income from sales:			
Sales	$50,000	$26,000	$76,000
Less—sales returns and allowances	140	75	215
Net sales	$49,860	$25,925	$75,785
Cost of goods sold	36,500	20,100	56,600
Gross trading profit	$13,360	$ 5,825	$19,185
Operating expenses:			
Salaries of sales clerks	$ 3,500	$ 2,500	$ 6,000
Other selling expenses	1,458	1,042	2,500
Office salaries	1,632	1,168	2,800
Other general expenses	2,915	2,085	5,000
Total operating expenses	$ 9,505	$ 6,795	$16,300
Net profit	$ 3,855	($970)	$ 2,885

($970.00) means net loss for department B.

Which Salesmen Are Productive?
(using second assumption)

If a salesman's traveling expense account increases from $200 to $300 in one month, how may we justify the increase? Is it possible to verify each item appearing in this expense account? Is the vital problem verification? Or is it justification of such an expense increase through increased sales volume?

Suppose we assume that our salesmen are not selling over the counter but are meeting customers outside the walls of our business. Then the expense section of the operation statement might read:

Third illustration (using second assumption)

Selling expenses:		
Salaries of salesmen	$6,000	
Traveling expenses	2,000	
Other selling expenses	500	$ 8,500
General expenses:		
Office salaries	$2,800	
Other general expenses	5,000	7,800
Total expenses		$16,300

Let us further assume that salesmen 1, 2 and 3 are employed in department A and salesmen 4 and 5 in department B. Their salaries and traveling expenses are:

	Department A				Department B		
	1	2	3	Total	4	5	Total
Salaries of salesmen.	$1,500	$1,000	$1,000	$3,500	$1,200	$1,300	$2,500
Traveling expenses..	600	500	400	1,500	300	200	500
	$2,100	$1,500	$1,400	$5,000	$1,500	$1,500	$3,000

Using salaries and expenses of salesmen as the basis, the departmental statement of profit and loss would appear as follows (the income from sales and the cost of goods sold sections are shown in the first and second illustrations):

Fourth illustration (using second assumption)

	Dept. A	Dept. B	Total
Gross trading profit.....	$13,360.00	$5,825.00	$19,185.00
Operating expenses:			
Salesmen salaries.....	3,500.00	2,500.00	6,000.00
Traveling expenses.....	1,500.00	500.00	2,000.00
(Basis of allocation).....	(5,000.00)	(3,000.00)	(8,000.00)
(Percentage rate).....	(62½%)	(37½%)	(100%)
Other selling expenses.....	312.50	187.50	500.00
Office salaries.....	1,750.00	1,050.00	2,800.00
Other general expenses.....	3,125.00	1,875.00	5,000.00
Total operating expenses....	$10,187.50	$6,112.50	$16,300.00
Net profit.....	$ 3,172.50	$ (287.50)	$ 2,885.00

Now let us determine the productiveness of each of the salesmen. The sales volume of each of the men is kept for a variety of purposes. The sales volume may now be used for determining the productiveness (in terms of gross profit) of each salesman.

Let us assume that the $49,860 net sales volume of department A is sold by:

Salesman	Dollar sales volume
No. 1.....	$24,860
" 2.....	15,000
" 3.....	10,000

The $25,925 net sales volume of department B is sold by:

No. 4.....	$15,925
" 5.....	10,000

The cost of goods sold by each salesman and the gross profit earned may be derived by determining the gross profit rate for

department A. The gross profit rate for department A is found by dividing gross trading profit by the net sales. Thus, $\frac{\$13,360}{\$49,860}$ is 26.795%, the gross profit rate for department A; $\frac{\$5,825}{\$25,925}$ is 22.468%, the gross profit rate for department B. The rate of gross profit is necessary to calculate the cost of goods sold, for which each salesman is responsible. The management then has an opportunity to study variations in rates of gross profit as between the departments.

Using the rate of gross profit in department A as 26.795%, the cost of goods sold in the department is 73.205% (net sales 100%, minus gross profit 26.795%). The rate per cent. of cost of goods sold in department B is 77.532% (net sales 100%, minus 22.468% of gross profit). It is necessary to determine the rate per cent. of cost of goods sold in each department, since the mark-ups or gross trading profit tend to differ among departments. In this case the difference between the rate of gross profit in the two departments is 4.327% (77.532% minus 73.205%). This variation will make a difference in determining the gross profit and the resulting net profit for which each salesman is responsible.

With the use of these rates, the gross profit per salesman is determined by multiplying the net sales figure by the gross profit rate to find the amount of gross profit. For instance, salesman No. 1 has sold $24,860 worth of goods. By multiplying $24,860 by 25.795% we find a gross profit of $6,661.25; also by multiplying $24,860 by 73.205% we find the cost of goods sold, which is $18,198.75.

Fifth illustration

Analysis of salesmen and net profit (using second assumption)

	1	2	3	4	5	Total
Sales	$24,860.00	$15,000.00	$10,000.00	$15,925.00	$10,000.00	$75,785.00
Cost of sales	18,198.75	10,980.75	7,320.50	12,346.80	7,753.20	56,600.00
Gross profit	$ 6,661.25	$ 4,019.25	$ 2,679.50	$ 3,578.20	$ 2,246.80	$19,185.00
Expenses:						
Direct	$ 2,100.00	$ 1,500.00	$ 1,400.00	$ 1,500.00	$ 1,500.00	$ 8,000.00
Allocated	2,178.75	1,556.25	1,452.50	1,556.25	1,556.25	8,300.00
Total	$ 4,278.75	$ 3,056.25	$ 2,852.50	$ 3,056.25	$ 3,056.25	$16,300.00
Net profit	$ 2,382.50	$ 963.00	($173.00)	$ 521.95	($809.45)	$ 2,885.00

($173.00) and ($809.45) are net losses for which salesmen Nos. 3 and 5 are responsible.

In the above analysis the direct expenses are found by combining the salesmen's salaries and the traveling expense for each

salesman. The combined totals of these two items of expense form the basis of allocation. Hence, salesman No. 1, $2,100; salesman No. 2, $1,500; salesman No. 3, $1,400 give a combined total of $5,000, which is the total of salesmen's salaries and traveling expenses for department A. The fraction $\frac{\$2,100}{\$5,000}$ multiplied by $5,187.50 (total indirect expenses) equals $2,178.75, the portion of other selling expenses, office salaries and other general expenses allocated to salesman No. 1. By the same process using $\frac{\$1,500}{\$5,000}$ times $5,187.50, we find $1,556.25, the amount allocated to salesman No. 2. Salesman No. 3 is chargeable with $1,452.50 of the allocated expenses by use of the fraction $\frac{\$1,400}{\$5,000}$. The total salesmen's salaries and traveling expenses in department B are $3,000. Salesmen No. 4 and No. 5 are paid the same amount. Hence, they share the indirect expenses, $3,112.50, equally.

By subtracting the sum of the direct selling expenses and the indirect selling and general expenses (that is, the allocated expenses) from the gross profit, we obtain the net profit or loss per salesman.

Although department A has shown a net profit, we find on analysis that salesman No. 3 is a "sub-marginal producer," since he is responsible for a net loss of $173. Even though department B is operated at a net loss, we find that salesman No. 5 is responsible for a net profit of $521.95.

The outcome of this analysis may be that salesmen Nos. 3 and 5 will be given a sales quota in excess of $10,000. If this sales quota is not reached in the coming periods, the continuance of their employment will be seriously considered.

Third Assumption Illustrated

Frequently salesmen meet their customers outside the walls of the business but have office or desk space provided under the same roof as the administrative, stenographic and clerical employees. In these circumstances the indirect selling and general expenses may be divided among departments and salesmen on the basis of the directly traceable costs of each individual salesman.

The general overhead, composed of rent, taxes, depreciation, light, heat, etc., is shared by the departments according to direct selling costs. Then departmental costs are divided among the salesmen on the same basis.

Office salaries and miscellaneous general expenses (telephone, telegraph, postage, supplies) are shared by the departments according to direct selling expenses (salesmen's salaries, traveling expenses and commissions). Then salesmen divide the departmental total among themselves using the same basis, namely, the relation of the departmental direct selling expenses to the total direct selling expenses.

Let us assume the expense section to be as follows:

Selling expenses:		
Salaries of salesmen	$6,000	
Traveling expenses	2,000	
Commissions	500	$ 8,500
General expenses:		
Office salaries	$2,800	
Rent	3,200	
Taxes	400	
Depreciation	600	
Light and heat	300	
Miscellaneous general expenses	500	7,800
Total expenses		$16,300

The departments and their salesmen are identified with the following expenses:

Salesmen	Salaries	Traveling expenses	Commissions	Total	%
		Department A			
No. 1	$1,500	$ 600	$225	$2,325	27.35
" 2	1,000	500	125	1,625	19.12
" 3	1,000	400	...	1,400	16.47
Total dept. A	$3,500	$1,500	$350	$5,350	62.94
		Department B			
No. 4	$1,200	$ 300	$150	$1,650	19.41
" 5	1,300	200	...	1,500	17.65
Total dept. B	$2,500	$ 500	$150	$3,150	37.06
Total dept. A and B	$6,000	$2,000	$500	$8,500	100.00

The general expenses, amounting to $7,800, are to be divided between the two departments and among the five salesmen on the basis of the relation between the salaries, traveling expenses and commissions paid each salesman to the total direct selling expenses ($8,500). By referring to the records kept with each individual salesman (by the sales manager or in the general account-

ing records) we find that the percentage rate in the case of each salesman is:

Sixth illustration (using third assumption)

Salesmen	Amounts	Rate	
No. 1	$2,325	27.35%	
" 2	1,625	19.12%	
" 3	1,400	16.47%	
Total department A			62.94%
No. 4	1,650	19.41%	
" 5	1,500	17.65%	
Total department B			37.06%
Total for departments A and B			100.00%

The operating statement will appear as follows: (Income from sales and cost of goods sold are omitted. See page 214 for details.)

		Dept. A		Dept. B	Total
Gross trading profit		$13,360.00		$5,825.00	$19,185.00
Operating expenses:					
Salesmen's salaries	(a)	3,500.00	(a)	2,500.00	6,000.00
Traveling expenses	(a)	1,500.00	(a)	500.00	2,000.00
Commissions	(a)	350.00	(a)	150.00	500.00
(Basis of allocation)		(5,350.00)		(3,150.00)	(8,500.00)
(Department rate)		62.94%		37.06%	100.00%
Office salaries	(b)	1,762.35	(b)	1,037.65	2,800.00
Rent	(b)	2,014.08	(b)	1,185.92	3,200.00
Taxes	(b)	251.76	(b)	148.24	400.00
Depreciation	(b)	377.64	(b)	222.36	6.00
Light and heat	(b)	188.82	(b)	111.18	300.00
Miscellaneous Expense	(b)	314.71	(b)	185.29	500.00
Total operating expenses		$10,259.36		$6,040.64	$16,300.00
Net profit		$ 3,100.64		($215.64)	$ 2,885.00

($215.64) represents the net loss of department B.

The analysis of each salesman's results to determine the net profit for which he is responsible may be done in the same manner as shown in the fifth illustration. Since the gross profit for each of the salesmen is the same it is not shown in detail.

Seventh illustration
Net profit per salesman (using the third assumption)
(Sales and cost of goods sold are shown in detail in the fifth illustration)

	No. 1	No. 2	No. 3	No. 4	No. 5	Total
Gross profit	$6,661.25	$4,109.25	$2,679.50	$3,578.20	$2,246.80	$19,185.00
Expenses:						
Direct	$2,325.00	$1,625.00	$1,400.00	$1,650.00	$1,500.00	$ 8,500.00
(See sixth illustration)						
Allocated:						
Office salary	$ 765.80	$ 535.36	$ 461.16	$ 543.48	$ 494.20	$ 2,800.00
Rent	875.20	611.84	527.04	621.12	564.80	3,200.00
Taxes	109.40	76.48	65.88	77.64	70.60	400.00
Depreciation	164.10	114.72	98.82	116.46	105.90	600.00
Light and heat	82.05	57.36	49.41	58.23	52.95	300.00
Misc. expense	136.75	95.60	82.35	97.05	88.25	500.00
Total	$2,133.30	$1,491.36	$1,284.66	$1,513.98	$1,376.70	$ 7,800.00
Total expense	$4,458.30	$3,116.36	$2,684.66	$3,163.98	$2,876.70	$16,300.00
Net profit (loss)	$2,202.95	$ 902.89	$ (5.16)	$ 414.22	$ (629.90)	$ 2,885.00

It should be noted that, even though department B shows a net loss, salesman No. 4 is really productive in the sense that he is responsible for a net profit. In department A, salesman No. 3 is a marginal producer. Thus a sales volume of $10,000 results from paying a salary of $1,000 to which is added $400 in traveling expenses. Might it not be possible to put salesman No. 5 on the same basis as that of salesman No. 3? Or an increased sales quota of, say, $12,500 might be assigned to salesman No. 5 for the following fiscal period.

Other Methods of Distributing Selling and General Expenses

If it is thought desirable and the cost of keeping such records is worth the effort, the selling and general expenses are sometimes charged against the department authorizing the expenditure. This department is presumed to receive the benefit from the goods or services consumed in the distributing of commodities. This has been done in a few retail bond houses. Auxiliary cost records must be kept, in addition to the general accounting records. This means a greater volume of record-keeping and the information regarding distribution costs must be worth the added expenditures for keeping records.

If the rate of gross profit or mark-up is uniform for all departments on all articles sold, the dollar volume of sales may be used

as the basis for dividing the indirect selling expenses and the general expenses among the departments and the salesmen. In a small undepartmentalized business, this method of dividing all expenses, other than direct selling expenses, among the several salesmen may be used with success. It is probably more equitable in this type of a business, since the mark-up is apt to be the same throughout the business on all kinds of commodities sold. If the margin of profit varies among departments or on the goods sold, probably the direct salary costs are a better basis for distributing the other selling and general expenses.

Of course, the easiest and most inequitable method is the equal division of expenses among the departments and then among the salesmen. This method presumes that sales volumes of departments and the mark-ups on all classes of commodities are approximately the same. This situation is not apt to exist in a large departmentalized business, hence this method should be used in only a small number of instances.

Choice of a Basis of Allocation

As long as selling is a human and not a mechanical process, the salesman is the motivating force of the transaction which results in the customer's having the goods and the store's having the money, either at once or in the future.

In an undepartmentalized business, having several salesmen, the productiveness of each salesman in terms of net profit or loss may be determined by using the relation of the sales quota of each salesman to total sales as the basis for dividing the indirect selling and general expense. This is probably the most equitable and practical way to divide expenses among salesmen in a small business.

In a large departmentalized business direct selling costs, such as salaries, commissions and traveling expenses, may be used as a basis for dividing all other selling and general expenses among the departments and salesmen. However, several considerations should be kept in mind:

(1) Do the salesmen's salaries (combined with traveling expenses and commissions) compose a large fraction of the total selling and general expenses? To form a valid basis for the allocation of indirect expenses they should amount to at least 30% of the total expense of this group.

(2) Has a careful study been made of the departments and the salesmen in them, so as to determine the place in which the sales effort is expended? (In the case of persons dividing their time between departments, a division of salary should be carefully made.)

(3) What consideration should be given to salaries other than sales salaries? (These salaries, such as those paid to the record-keeping and accounting, stenographic and filing employees, may be considered to be directly responsible for the recording, communicating and preserving of the history and effects of sales transactions. The department with the largest amount of sales salaries is expected to do the largest amount of business, hence it must bear a lion's share of the salaries paid to employees not engaged in selling, who devote their efforts to certain necessary business activities which vary with volumes of goods sold.)

If the statements of profit and loss for departmental trading businesses are made to show the net profits, rather than the gross profits, the burden of the argument here set forth will be justified.

Students' Department

H. P. BAUMANN, *Editor*

AMERICAN INSTITUTE EXAMINATIONS

[NOTE.—The fact that these answers appear in THE JOURNAL OF ACCOUNTANCY should not cause the reader to assume that they are the official answers of the board of examiners. They represent merely the opinions of the editor of the *Students' Department.*]

EXAMINATION IN ACCOUNTING THEORY AND PRACTICE—PART I

May 16, 1935, 1:30 P. M. to 6:30 P. M.

Solve problem 1 or 2 and all other problems.

No. 7 (10 points):

The Dimenslot Company maintains a branch office in a distant city where the only financial transactions authorized are the collection and deposit in bank of receipts from automatic vending machines, the payment of branch payrolls and expenses and the remittance to the factory of funds in excess of branch requirements. Monthly reports of cash receipts and disbursements are sent to the factory.

In conducting an audit of the factory for a fiscal year ended June 30th, the auditor forwarded the twelve monthly cash reports to his representative in the city where the branch was located, with the request that they be compared with the records maintained at the branch and that such records be audited. In due course he received a report from his representative stating that the monthly reports were in agreement with the books and that the balance in bank at the end of the year had been verified directly with the depository. The representative also stated that the deposits as shown by the bank statements and the cheques issued by the branch exceeded, respectively, the receipts and disbursements shown by the books. Such excess, he stated, consisted of contra items, and he included, without further comment, the following summary of disbursements not appearing on the monthly reports and the branch books.

	(1) Bank loans, subsequently renewed	(2) Cheques returned, subsequently redeposited	(3) Cheques to employees	(4) Accommodation purchases
July	$ 4,600.00	$ 20.45	$ 58.24	$
August		200.00	400.00	271.80
September		15.00		707.84
October	4,600.00	37.25		750.00
November			5.00	
December	3,000.00	60.00	223.40	156.00
January			300.00	
February			620.00	
March			200.00	
April				
May		23.50		
June			335.55	203.35
	$12,200.00	$356.20	$2,142.19	$2,088.99

What do you understand from each of the four numbered columns? What would be the contra items for each of these classifications?

If you were the auditor, what objections would you have to the report made by the representative?

How would you dispose of this matter so far as your client is concerned?

Solution:

The listed disbursements would indicate:

(1) Cheques drawn by branch, or charges made by the bank for payment of bank loans previously made.
(2) Cheques drawn by branch, or charges made by the bank, for cheques deposited by branch which were returned unpaid.
(3) Cheques drawn by the branch to employees.
(4) Cheques drawn by the branch in payment for merchandise or other items as accommodation for employees or others.

The contra items were for deposits of currency, or cheques, or credits granted by the bank.

The auditor's representative should have given a more detailed report covering, particularly, the contra items. The branch manager has unquestionably exceeded his authority which was limited to "the collection and deposit in bank of receipts from automatic vending machines, the payment of branch payrolls and expenses and the remittance to the factory of funds in excess of branch requirements." The representative of the auditor should have been informed of these limitations and should have obtained full details of all transactions not within such scope. He should have the answer to these questions:

For what purpose were the bank loans made, what happened to the funds thus obtained, and from what funds were the payments of the loans made?

Were the cheques which were deposited and returned, cheques of employees or operators of the vending machines?

Why should cheques, other than payroll cheques, be issued to employees?

Why should the credit of the branch be used in making accommodation purchases, and for whom were these purchases made?

Is there sufficient control over the merchandise and cash so that it may be reasonably certain that all currency removed from the machines is being deposited intact?

Is there any possibility that the credit and cash of the branch is being used to finance another business or being used by the branch manager or some other individual?

Has the bank in any way exceeded its authority in granting the loans to the branch?

Who paid the interest on the loans?

The client should be instructed:

(1) To install a working and change fund at the branch from which current petty expenses could be paid. This fund would be reimbursed as required, from funds sent by the home office.
(2) The authority to sign cheques or notes should be restricted to officers at the home office.
(3) All collections should be deposited intact each day, and duplicate deposit slips sent to the home office.
(4) Payroll cheques would be drawn by the home office.

(5) Funds could be drawn from the branch bank by drawing a cheque in the home office on that bank.

(6) If the system of internal check on the merchandise and the cash is not satisfactory to the auditor, he should discuss methods of improvement.

No. 8 (5 points):

The City of Noware owns and operates the electric light plant serving the city. Bonds maturing in 20 years were issued to acquire the plant and, in terms of the issue, a sinking fund must be established by equal annual cash instalments to provide for the retirement of the bonds at maturity. Adequate depreciation is provided out of the revenue but it is alleged that, inasmuch as the taxes to be levied must include the annual sinking-fund payments, the amount thereof should be charged against the operations of the utility. If this is not done, it is argued, the earnings of the utility will be overstated by the amount of the sinking-fund contributions.

1. What is your opinion? Give reasons.
2. What should be done in case the trust deed under which the bonds were issued explicitly states that the sinking fund is to be charged against the operations of the utility?

Solution:

(1) A distinction must be made between the revenue account and the cash account of the electric light plant. The revenue account should be charged with depreciation, but it should not be charged for the contributions to the sinking fund. The cash account should show receipts from the taxes received from the tax levy, and should show the cash disbursements representing the sinking-fund contributions. The tax levy should not include a provision for the depreciation (which is a book entry only, and does not affect funds).

(2) When a cheque is drawn for the sinking fund the entry would be:

Sinking fund cash	$	
Cash in bank		$

Hence, it is not possible to charge the sinking fund contribution to revenue account.

The trust deed requirement may be interpreted as intending a provision for a sinking-fund reserve, which could be set up by means of the following entry:

Revenue account	$	
Reserve for sinking fund		$

After the bonds have been retired, the sinking-fund reserve may be reversed to the surplus account.

Examination in Accounting Theory and Practice—Part II

May 17, 1935, 1:30 P. M. to 6:30 P. M.

Solve all problems.

No. 1 (25 points):

On December 31, 1933, a line of freighters—8 vessels of 6,000 tons, each costing $640,000 to build, or together $5,120,000, has outstanding $3,500,000 of capital stock, on which 11% was earned in 1933, after providing 5% for depreciation. It is assumed that thereafter each vessel will have the same gross earning capacity as in 1933, until it becomes obsolete after 20 years' regular operation. The vessels will not be replaced but will be sold at junk value at that time. No surplus or excess cash is allowed to accumulate, all funds in excess of requirements being distributed to the shareholders.

As the vessels grow older, the annual repair and maintenance costs increase as follows:

Up to 5 years old 1% of original cost
" " 10 " " 2% " " "
" " 15 " " 3% " " "
" " 20 " " 4% " " "

On December 31, 1933, the eight vessels owned are:

4– 3 years old
2–10 " "
2–12 " "

The line is offered on that date three similar vessels, respectively 8, 14 and 16 years old, for $880,000, payable in 6% bonds that fall due serially on December 31st of each succeeding year to the amount of the depreciation accrued in that year on the three vessels.

1. Prepare a statement showing the financial advantage or disadvantage of the purchase for each year in which any of the three vessels are operated.
2. What would be the advantage or disadvantage to the original shareholders (not to the company) in financing the purchase by the issue of common stock at par value?

Solution:

The following is a schedule of the maintenance and depreciation charges on the three additional vessels purchased:

	Annual repair and maintenance charges					Total maintenance and
Year	Number 1	Number 2	Number 3	Total	Depreciation	depreciation
1934	$ 12,800	$ 19,200	$ 25,600	$ 57,600	$120,000	$ 177,600
1935	12,800	25,600	25,600	64,000	120,000	184,000
1936	19,200	25,600	25,600	70,400	120,000	190,400
1937	19,200	25,600	25,600	70,400	120,000	190,400
1938	19,200	25,600	.....	44,800	80,000	124,800
1939	19,200	25,600	.....	44,800	80,000	124,800
1940	19,200	.....	.....	19,200	40,000	59,200
1941	25,600	.....	.....	25,600	40,000	65,600
1942	25,600	.....	.....	25,600	40,000	65,600
1943	25,600	.....	.....	25,600	40,000	65,600
1944	25,600	.....	.....	25,600	40,000	65,000
1945	25,600	.....	.....	25,600	40,000	65,600
Totals	$249,600	$147,200	$102,400	$499,200	$880,000	$1,379,200

As the three ships purchased are "similar vessels" it is assumed that the repair and maintenance charges would be similar in amount (according to age) as those vessels already owned. Depreciation is computed on the basis of $40,000 per year per vessel; as follows:

Vessel	Remaining life
1	12 years
2	6 "
3	4 "
Total	22 years

As the cost of the three vessels is $880,000 and the remaining useful life is 22 years, the annual depreciation charge is $880,000 ÷ 22, or $40,000 per year, of useful life.

The interest charges on the outstanding bonds is shown below:

Year	Bonds outstanding	Interest payable
1934	$880,000	$ 52,800
1935	760,000	45,600
1936	640,000	38,400
1937	520,000	31,200
1938	400,000	24,000
1939	320,000	19,200
1940	240,000	14,400
1941	200,000	12,000
1942	160,000	9,600
1943	120,000	7,200
1944	80,000	4,800
1945	40,000	2,400
Total		$261,600

The average annual gross income, considered as being the same as earned during the year ended December 31, 1933, on the vessels now owned, is computed below:

Gross income for the year ended December 31, 1933:		
Net earnings—11% of $3,500,000		$385,000
Add—		
Depreciation—5% of $5,120,000		256,000
Cost of repairs and maintenance:		
4 vessels 3 years old (1% of $2,560,000)	$25,600	
2 vessels 10 years old (2% of $1,280,000)	25,600	
2 vessels 12 years old (3% of $1,280,000)	38,400	89,600
Gross income		$730,600

The average gross earning of each vessel is, therefore, $730,600 ÷ 8 or $91,325

Statement showing estimated earnings, by years, of the three vessels purchased

Year	Vessels operated	Gross earnings	Maintenance and depreciation	Profit before interest on bonds	Interest on bonds	Net earnings
1934	3	$ 273,975	$ 177,600	$ 96,375	$ 52,800	$ 43,575
1935	3	273,975	184,000	89,975	45,600	44,375
1936	3	273,975	190,400	83,575	38,400	45,175
1937	3	273,975	190,400	83,575	31,200	52,375
1938	2	182,650	124,800	57,850	24,000	33,850
1939	2	182,650	124,800	57,850	19,200	38,650
1940	1	91,325	59,200	32,125	14,400	17,725
1941	1	91,325	65,600	25,725	12,000	13,725
1942	1	91,325	65,600	25,725	9,600	16,125
1943	1	91,325	65,600	25,725	7,200	18,525
1944	1	91,325	65,600	25,725	4,800	20,925
1945	1	91,325	65,600	25,725	2,400	23,325
Totals		$2,009,150	$1,379,200	$629,950	$261,600	$368,350

Schedule I

Schedule showing the estimated cost of repairs and maintenance, depreciation, gross earnings and net earnings of the eight old vessels owned

Year	Repairs and maintenance: 4 Vessels	2 Vessels	2 Vessels	Total	Depreciation	Total repairs, maintenance and depreciation	Gross earnings	Net earnings
1934	$ 25,600	$ 38,400	$ 38,400	$ 102,400	$ 256,000	$ 358,400	$ 730,600	$ 372,200
1935	25,600	38,400	38,400	102,400	256,000	358,400	730,600	372,200
1936	51,200	38,400	38,400	128,000	256,000	384,000	730,600	346,600
1937	51,200	38,400	51,200	140,800	256,000	396,800	730,600	333,800
1938	51,200	38,400	51,200	140,800	256,000	396,800	730,600	333,800
1939	51,200	51,200	51,200	153,600	256,000	409,600	730,600	321,000
1940	51,200	51,200	51,200	153,600	256,000	409,600	730,600	321,000
1941	76,800	51,200	51,200	179,200	256,000	435,200	730,600	295,400
1942	76,800	51,200	.....	128,000	192,000	320,000	547,950	227,950
1943	76,800	51,200	.....	128,000	192,000	320,000	547,950	227,950
1944	76,800	.....	.....	76,800	128,000	204,800	365,300	160,500
1945	76,800	.....	.....	76,800	128,000	204,800	365,300	160,500
1946	102,400	.....	.....	102,400	128,000	230,400	365,300	134,900
1947	102,400	.....	.....	102,400	128,000	230,400	365,300	134,900
1948	102,400	.....	.....	102,400	128,000	230,400	365,300	134,900
1949	102,400	.....	.....	102,400	128,000	230,400	365,300	134,900
1950	102,400	.....	.....	102,400	128,000	230,400	365,300	134,900
	$1,203,200	$448,000	$371,200	$2,022,400	$3,328,000	$5,350,400	$9,497,800	$4,147,400

Schedule II

Statement showing the profits per share on the different bases

Year	Profit on 8 Vessels	Profit on 3 Vessels	Profit on 11 Vessels	Profit per share (35,000 shares) 8 Vessels	Profit per share (35,000 shares) 11 Vessels	Profit on basis of additional stock issue 8 Vessels	Profit on basis of additional stock issue 3 Vessels	Profit on basis of additional stock issue 11 Vessels	Profit per share (43,800 shares) 3 Vessels	Profit per share (43,800 shares) 11 Vessels
1934.....	$ 372,200	$ 43,575	$ 415,775	$ 10.634	$ 11.879	$ 372,200	$ 96,375	$ 468,575	$ 2.200	$ 10.698
1935.....	372,200	44,375	416,575	10.634	11.902	372,200	89,975	462,175	2.054	10.551
1936.....	346,600	45,175	391,775	9.903	11.193	346,600	83,575	430,175	1.908	9.821
1937.....	333,800	52,375	386,175	9.537	11.033	333,800	83,575	417,375	1.908	9.529
1938.....	333,800	33,850	367,650	9.537	10.504	333,800	57,850	391,650	1.321	8.941
1939.....	321,000	38,650	359,650	9.171	10.275	321,000	57,850	378,850	1.321	8.649
1940.....	321,000	17,725	338,725	9.171	9.677	321,000	32,125	353,125	.733	8.062
1941.....	295,400	13,725	309,125	8.440	8.832	295,400	25,725	321,125	.587	7.331
1942.....	227,950	16,125	244,075	6.513	6.973	227,950	25,725	253,675	.587	5.791
1943.....	227,950	18,525	246,475	6.513	7.042	227,950	25,725	253,675	.587	5.791
1944.....	160,500	20,925	181,425	4.585	5.183	160,500	25,725	186,225	.587	4.251
1945.....	160,500	23,325	183,825	4.585	5.252	160,500	25,725	186,225	.587	4.251
1946.....	134,900	.....	134,900	3.854	3.854	134,900	.....	134,900	.....	3.079
1947.....	134,900	.....	134,900	3.854	3.854	134,900	.....	134,900	.....	3.079
1948.....	134,900	.....	134,900	3.854	3.854	134,900	.....	134,900	.....	3.079
1949.....	134,900	.....	134,900	3.854	3.854	134,900	.....	134,900	.....	3.079
1950.....	134,900	.....	134,900	3.854	3.854	134,900	.....	134,900	.....	3.079
	$4,147,400	$368,350	$4,515,750	$118.493	$129.015	$4,147,400	$629,950	$4,777,350	$14.380	$109.061

The amount available for dividends is:

If bonds are issued	$368,350
If stock is issued	629,950

As shown in schedule II, the profits per share on the 35,000 shares of stock outstanding will be increased from $118.49 to $129.01 if the three additional vessels are purchased and paid for in 6 per cent. bonds. It will also be seen in that schedule, that if the three additional vessels are purchased by means of the issuance of 8,800 additional shares of stock, rather than by the issuance of bonds, that the earnings per share will decrease from $129.02 to $109.06, or less than the original stockholders would have received if the additional vessels were not acquired. This decrease is due to the following:

The slight increase in total profits is divided among 43,800 shares instead of 35,000 shares.

The new stockholders will share in the profits of the original vessels, after the additional vessels become obsolete.

The cost of the additional vessels is in excess of the cost of those now owned. Those now owned cost $640,000 each, and the additional ones have a cost basis of (20 years times $40,000) $800,000.

No. 2 (20 points):

G and H are domestic companies whose audited balance-sheets of December 31, 1934, are as follows:

Assets	G	H
Cash	$ 15,000	$ 2,500
Accounts receivable—good and collectible	14,000	19,000
Marketable securities		
Owned by Company G (market value $10,000)	18,000	
Owned by Company H (market value $27,000)		27,000
Investment in Company K (wholly owned) represented by 5,000 shares—at cost (market value $1,000,000)	500,000	
Investment in H—book value (120 shares)	1,200	
Investment in G—book value (800 shares)		80,000
	$548,200	$128,500
Liabilities		
Accounts payable	$ 15,000	
Capital:		
6,000 shares, par value $100	600,000	
10,000 shares, par value $10		$100,000
Surplus		28,500
Deficit (italics indicate red figure)	*66,800*	
	$548,200	$128,500

Under a plan of reorganization the companies G and H are to be merged at December 31, 1934, to form a company J with an authorized capital of $2,000,000 representing 20,000 shares of $100 each. All shareholders agree to the merger except X who owns 100 shares of G and 2,000 shares of H. However, X will accept for his interest in the two companies an equivalent amount of company K shares at their market value. He will receive cash for any fractional part of a company K share.

The other shareholders will receive company J shares at their par of $100 each. They will pay or receive cash in lieu of fractional J shares and it is intended to pay out the smallest amount of cash to each of the two groups of company G and H shareholders.

1. How many shares of company K and how much cash are distributable to X?
2. How many shares of company J and how much cash are distributable to each of the two groups of shareholders G and H?
3. Prepare the opening balance-sheet of company J.

Solution:

The net worth of Companies G and H exclusive of the intercompany stockholdings is shown below:

	Companies		
	G	H	Total
Cash	$ 15,000	$ 2,500	$ 17,500
Accounts receivable—good and collectible	14,000	19,000	33,000
Marketable securities—at market values	10,000	27,000	37,000
Investment in Company K—at market value	1,000,000	.....	1,000,000
Total assets, excluding intercompany stockholdings	$1,039,000	$48,500	$1,087,500
Less: accounts payable	15,000	.....	15,000
Net worth, excluding intercompany stockholdings	$1,024,000	$48,500	$1,072,500

Let G = the actual worth of Company G, and
H = the actual worth of Company H.

(1) Then, G = 12/1,000H + $1,024,000, or
(2) G = .012H + $1,024,000
(3) H = 8/60G + $48,500, or
(4) H = 2/15G + $48,500, or
(5) 15H = 2G + $727,500

Substituting (2) for G in (5):

15H = 2(.012H + $1,024,000) + $727,500, or
15H = .024H + $2,048,000 + $727,500, or
14.976H = $2,775,500
(6) H = $185,329.86

Substituting (6) for H in (2):

G = .012($185,329.86) + $1,024,000, or
G = $2,223.96 + $1,024,000, or
G = $1,026,223.96

(1) The following shows the computation of the number of shares of company K and the amount of cash distributable to X:

Value of 100 shares of stock of company G:	
100/6,000 of $1,026,223.96	$17,103.73
Value of 2,000 shares of stock of company H:	
2,000/10,000 of $185,329.86	37,065.97
Total	$54,169.70
Market price of the 270 shares of company K stock to be issued to X	54,000.00
Cash to be paid to X	$ 169.70

(2) The following shows the computation of the number of shares of Company J stock and cash to be issued to the stockholders of Companies G and H:

	Companies		
	G	H	Total
Actual worth, as computed above	$1,026,233.96	$185,329.86	$1,211,553.82
Less: amounts paid to X	17,103.73	37,065.97	54,169.70
Balance	$1,009,120.23	$148,263.89	$1,157,384.12
Deduct: intercompany investments:			
8/60 of $1,026,223.96	136,829.86		
.012 of $185,329.86		2,223.96	139,053.82
Remainder to shareholders	$ 872,290.37	$146,039.93	$1,018,330.30
Stock in Company J:			
To shareholders of Company G (8,723 shares)	872,300.00		
To shareholders of Company H (1,460 shares)		146,000.00	1,018,300.00
Balance in cash	$ *9.63*	$ 39.93	$ 30.30

(3)

COMPANY J
Balance-sheet—December 31, 1934
(After giving effect to merger)

Assets

Cash	$ 17,300
Accounts receivable	33,000
Marketable securities	37,000
Investment in Company K (94.6% owned) at market value	946,000
Total assets	$1,033,300

Liabilities and net worth

Accounts payable	$ 15,000
Capital stock-authorized 20,000 shares of a par value of $100 each; outstanding 10,183 shares	1,018,300
Total liabilities and net worth	$1,033,300

Accounting Questions

[The questions and answers which appear in this section of THE JOURNAL OF ACCOUNTANCY have been received from the bureau of information conducted by the American Institute of Accountants. The questions have been asked and answered by members of the American Institute of Accountants who are practising accountants and are published here for general information. The executive committee of the American Institute of Accountants, in authorizing the publication of this matter, distinctly disclaims any responsibility for the views expressed. The answers given by those who reply are purely personal opinions. They are not in any sense an expression of the Institute nor of any committee of the Institute, but they are of value because they indicate the opinions held by competent members of the profession. The fact that many differences of opinion are expressed indicates the personal nature of the answers. The questions and answers selected for publication are those believed to be of general interest.—EDITOR.]

ACCOUNTS OF FLOUR BROKER

Question: A corporation is in the flour business. It represents a few mills, selling on commission, and also buys and sells for its own account.

It buys a carload of flour and gives a sight draft. It can not get possession of the flour unless it pays the sight draft. In the meantime it sells this flour to customers and bills them for it, debiting accounts receivable and crediting sales. At the same time it debits purchases and credits accounts payable for the flour sold. The flour is not delivered to the customer until released by payment of this draft.

Would it be correct to make a journal entry taking out such items both from the accounts receivable and accounts payable, and to show these accounts on the balance-sheet for merchandise actually sold, released and delivered?

Answer No. 1: In my opinion it would be incorrect to make a journal entry taking out the items described both from the accounts receivable and from the accounts payable and thus eliminating the liability and assets from the balance-sheet.

In my opinion the procedure is improper because it is proposed to omit a liability which has actually been incurred and not liquidated.

Answer No. 2: We can not see any justification in making a journal entry eliminating the items described from both accounts receivable and accounts payable. There can be no question that the corporation had a liability for the goods purchased, and it would be a false balance-sheet that failed to reveal it. By the same token others had purchased these goods from the corporation, delivery to be made presumably at some future date. In spite of this deferred delivery, we see no reason why the transactions should not be included in the year's business. The fact that title has not passed from the original seller would not justify him in carrying the goods in inventory at the year-end. He, too, has made a sale and should carry it on his balance-sheet as sight draft receivable.

Care should naturally be taken by the accountant to see that none of the goods sold by the corporation had been included in the year-end inventory in cases where drafts had been met before the year-end and goods had not yet been shipped to the ultimate purchaser.

BROKER'S COMMISSIONS

Question: In an audit of a corporation, certain payments to a broker were shown on the books as charges against sales instead of commissions. This broker was also known by the accountants to have been acting in the same capacity in behalf of other concerns in the same kind of business.

In view of the round sums represented in the cheques paid to him, the officers were questioned as to the propriety of such charges and the reason for charging such items against sales instead of the ordinary commission account. The accountants were advised that such payments were entirely in order and that in view of the nature of the particular transactions involved, the company preferred to charge such commissions directly against sales.

Reports of other accountants on audits of previous years during which even larger payments were made to the same broker did not allude to such transactions.

About two years later, the accountants learned that the greater part of the payments involved were not commissions on sales but rather represented settlement of certain agreements between some of the officers and this broker for losses sustained by him through the purchase and sale of the company's stock.

The minutes of the company did not refer to such transactions.

(1) Should the accountants refer to this entire situation in their current or subsequent reports? (2) What, in general, should be the position of an accountant concerning new information that may come into his possession relating to an audit made two or three years previous? Should such information be referred to in reports on audits of a current year?

Answer: In our opinion a full disclosure of the transactions referred to should be made in the current and also subsequent reports if the practice is continued. In the account submitted to the company the amount of sales as per the books should be increased by the charges improperly made thereto and the general expenditures should be correspondingly increased. The extent to which references should be made of the charges in previous years would depend largely upon circumstances.

ACCOUNTING FOR ADVANCES TO MINES BY COAL COMPANY

Question: A New York corporation obtained the exclusive sales rights of coal mines in Pennsylvania. In order to do so this corporation made advances to the mines. In a number of instances the mines closed in debt to this corporation. The advances to the mines were greater than the agreed value of the coal received. The contract price, which was the agreed value, was less than the prices fixed by the "line circular."

The question is in what section of the report shall loss, as a result of such advances, appear? Shall it go in "bad debts arising from sales" on the income tax return, because it really is a trade loss, or "arising from trade"? Shall it appear as an item in the "purchasing account" or "purchasing expense" or

"other costs" or under some other heading indicating this item as a "cost of goods sold," because it is directly connected with the purchasing end of the business? Shall it appear in the profit-and-loss section as a special loss not included in bad debts?

Answer No. 1: It is our opinion that the loss referred to in the inquiry is properly regarded as forming part of the bad debts to be charged in the profit-and-loss section.

The loss, however, clearly is not a "bad debt arising from sales" nor does it seem to us that it increases the cost of purchases or the costs incident thereto, inasmuch as failure by the mining company to meet its obligation in the agreed manner, namely, by the delivery of coal, evidently does not increase the cost of actual deliveries.

We should add that if the loss in question is at all material the item might well be shown as a separate item, thus serving a primary purpose of classification—clearness of presentation.

Answer No. 2: In the case cited I believe that the advances when written off should appear in the profit-and-loss section. It is distinctly a loss arising through the financing of a purveyor. So far as the tax return is concerned it should appear as a bad debt.

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