PRACTICES OF SELECTED LANSING COMMERCIAL FOOD SERVICE OPERATORS IN THE PREPARATION OF PROFIT AND LOSS STATEMENTS

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PRACTICES OF SELECTED LANSING COMMERCIAL FOOD SERVICE OPERATORS IN THE PREPARATION OF PROFIT AND LOSS STATEMENTS

By

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INTRODUCTION

Adequate records are important contributing factors in the successful management of a business organization. However, many operators do not keep adequate records nor do they feel that they can afford the services of a full time bookkeeper to maintain satisfactory records.

The small commercial food service operators in Michigan need a bookkeeping system so simplified that they are able to maintain their own records. To be acceptable and practical such a system must provide the information which the operators feel is necessary for successful management. A satisfactory system should involve a minimum amount of record keeping.

The purpose of this investigation will be to study the practices followed by selected Lansing commercial food service operators in the preparation of profit and loss statements. The extent of the detail presented on these statements and its role in influencing managerial action will be studied. The limitations presented by the practices investigated must necessarily be considered in designing a simplified bookkeeping system to facilitate the preparation of profit and loss statements.

It is hoped that the results of this investigation may serve as a basis for setting up a modified bookkeeping system which will be practical, workable and acceptable to the commercial food service operator in Michigan.

REVIEW OF LITERATURE

Importance of Accounting Records

Elwell (21) defined accounting as the science by which the transactions of an enterprise are systematically recorded and presented for interpretation and use by owners, executives, employees, creditors and investors. The necessity for adequate accounting records as a basic aid to business success has long been recognized.

Bryan and co-workers (11) pointed out that state and federal tax laws have made it mandatory that adequate and accurate accounting records be maintained. Operators must have a knowledge of their current food costs in order to be certain that they are complying with the law (16). Elwell (21) noted that any adjustments of price ceilings are based on accounting records and reports. Ceiling Price Regulation 134 (52) requires that the commercial food service operator maintain, for at least two years, all records necessary to determine food cost per dollar sale for any compliance period fixed under Ceiling Price Regulation 11.

In addition, Bryan and co-workers (11) noted that most of the data required for the completion of the income

tax forms of the business can be copied from the annual profit and loss statement. However, the primary objective of record keeping is to provide facts which will guide the owner in the profitable management of his restaurant.

Elwell (21) emphasized that a good accounting system gives the basis for the exercise of sound business judgment. Analytical thinking advocates the keeping of accounting records by every business organization. Radell (57) reported that scientific business management is essential to business success. Such management, according to Radell, is dependent upon definite knowledge obtained from adequate records.

Bryan (12), referring to school cafeteria management, concluded that the inability of management to deal with changing conditions may be partially attributed to a lack of financial and food cost control procedures.

Boyd and Dickey (6) commented that business failures could probably be reduced more than 50 per cent if management were kept properly and currently informed of trends and if such information were used intelligently. Informed management directs its attention to the specific causes of profit or loss and thus has a basis for taking necessary corrective action.

Roswell (61) maintained that too often reports are prepared only because of the demands of some outside agency, and that there is no thought of application of the information presented for management purposes. Elwell (21) stressed that the interpretive value of accounting statements is one of the primary reasons for keeping records in a business organization.

Good elementary business training is essential for the profitable management of a food service operation. MacDougal (39) indicated that many new business organizations have failed because the manager lacked understanding of bookkeeping principles and procedures. The United States Department of Labor (74) reported that an ability to handle cost control has been a definite aid to the promotion of persons who have entered the food service field.

The United States Department of Commerce (71) reported that three of the major reasons for business failure are lack of knowledge, insufficient capital and inadequate records. Putnam (56) cited that during World War II only 15 to 20 per cent of the restaurant operators in the United States knew their food cost or even knew how to figure it. Putnam felt that this was probably also true of payroll costs and other restaurant operating expenses.

Good accounting is an important contributing factor in the successful operation of a business. This fact was supported by a United States Department of Commerce (67) study of retail management practices. Of the profitably operated stores studied, 83 per cent kept up-to-date accounts. Of the unprofitably operated stores studied, only 40 per cent kept up-to-date accounts. Dahl (19) concluded that many proprietors do not keep adequate records or any books, because they feel that their business is too small to warrant the cost of the services of a trained bookkeeper.

Boyd and Dickey (6) reported that accounting systems are primarily designed to present income and expense data for designated periods of time. Elwell (21) concluded that the profit and loss statement is the most important single statement compiled in a business concern. Bryan and co-workers (11) stated that a record of income and expenses is essential to determine whether or not a restaurant is being operated profitably.

Husband and Schlatter (37) noted that profit and loss statements are important management aids. In addition, these statements form a basis for determining what future relationships of the business should be.

Brodner (8) emphasized that restaurant operators may expect their operating statements to furnish the

summary of the results of their sales, the measure of the efficiency of the operations, and the percentages necessary for intelligent comparison of business trends with those of similar restaurants.

Mishler (47), in her study of school lunchroom accounting methods, stated that present day small school lunchroom managers have had little or no accounting training. She recommended that simply designed and easily understood records be provided for them. She stressed that these systems should facilitate the preparation of a monthly profit and loss statements.

Frequency of Preparation of Profit and Loss Statements

The preparation of a profit and loss statement at least once a month seems to be a universal recommendation (8, 10, 11, 19, 31, 34, 47). Bryan and co-workers (11) suggested that the monthly profit and loss statements be summarized annually to provide a basis for completing state and federal income tax returns. For the sake of comparable time intervals and operating figures, the use of a four week period instead of the calendar month may be recommended. This practice is acceptable to the Office of Price Stabilization (52). Daily and weekly reports are additional variations which have been recommended (10, 11, 12, 19, 34).

Quarterly reports are not adequate for keeping the operator currently informed concerning his compliance with the law. Forster (28) expressed the opinion that yearly reports are merely a presentation of obsolete data.

Expense Distribution

The most useful form for the profit and loss statement, according to Boyd and Dickey (6), consists of three sections: (1) operating income, (2) operating expenses and (3) other income and expense.

Brodner (8) explained that the restaurant operator may expect his profit and loss statement to furnish him with the following information:

1. Sales (operating income)
2. Operating expenses
    a. Food costs
    b. Labor costs
    c. Other operating expenses
    d. Capital expenses or occupation costs
3. Other income and expense

Horwath and Horwath (35) recommended this same basic pattern, but they allowed for a more detailed expense classification. In lieu of an Other Operating Expenses classification, they encouraged the use of separate Operating Expenses and Maintence classifications. The detailed distribution proposed by these workers is as follows:

Operating Expenses

- Laundry and uniforms
- Fuel for cooking
- Electricity and lighting
- Ice and refrigeration
- Menus
- Stationery and printing
- Advertising
- Licenses and taxes (This does not include real estate, payroll or sales taxes.)
- Cleaning supplies and expense
- Sundry supplies
- Miscellaneous

Maintenance

- Equipment and building maintenance
- Uniforms

China and glassware, silverware and linen

Kitchen utensils

Repairs

Capital Expenses or Occupation Costs include

Rent

Water

Heat

Depreciation

Interest

Insurance

Amortization of leasehold improvements

Etc.

Extraneous items of income and expense are included in Miscellaneous Income or Expenses.

Brodner and co-workers (10) felt that simple presentation often makes for speedier recognition of necessary remedial steps than does a lengthy and detailed report. The report may be amplified or condensed to best fulfill the needs of the particular operation. Brodner (8) suggested that the small operator might limit the number of expense classifications to a few main divisions without sacrificing the possibility of comparisons with other establishments. Mishler (47) pointed out that the extent of detail to be presented on the statement may vary.

Although sales and purchases may or may not be distributed in groups, a detailed analysis provides a basis for more nearly complete control.

In a broad sense, food cost and payroll cost are the most important items of restaurant cost. They should appear on all restaurant profit and loss statements (60).

Comparative Figures

If the profit and loss statement is to be of any value, application must be made of the information which it presents. Forster (28) pointed out that many reports and statements prepared for restaurant operators are filed and never studied. He also explained that statements prepared in terms of dollars are necessary but that dollar aggregates may be of little value for comparative purposes. Dahl (19) agreed that comparison of findings on the basis of percentage of sales provides the most expedient method of comparing expenses.

Wenzel (77) emphasized that the first step toward efficiency in management is the utilization of percentages. He pointed out that percentages quickly show the weaknesses in a business. Although this claim may be an overstatement, Lasser (38) agreed that operating percentages are of great value in checking the efficiency and the trends of an operating business. Brodner (8) explained that management can establish percentage standards for each class of expenditures. Restaurant operators accept certain percentages as normal or average for specific types of operations. Benefit has been gained by the exchange of findings and comparison of percentages among restaurant operators.

McKinsey (41) stated that percentages, other than food cost and labor cost, may also be analyzed in detail. However, the general tendency is to keep the profit and loss statement brief and to supplement it with detailed reports.

Brodner and co-workers (10) recommended that the accounting system might facilitate the preparation of a comparative profit and loss statement. Such a statement encourages the comparisons of percentages for specified periods. Comparisons with corresponding months of previous years may be easily shown. Operating percentages of the current fiscal year to date may be readily compared with those of the prior fiscal year to date. The relative value of these comparisons must be determined by the operator.

Many operators avoid calculating and presenting percentages on the profit and loss statement. Forster (28) indicated that the thought of computing percentages is terrifying to some individuals. Yet knowledge of these percentages might be the most helpful management tool which these operators could possess. Brodner and co-workers (10) maintained that the profit and loss statement should provide for a simple computation and comparison of the percentages which might indicate the areas in which further analysis and remedial measures are necessary.

Labor Costs

Horwath and Horwath (35) maintained that the managerial wage should be included in the salaries and wages figure. All other costs incurred in connection with employees, according to these authorities, should also be included under the Labor Costs section of the profit and loss statement. These costs may be distributed over accounts such as salaries and wages, social security taxes, compensation insurance, employee benefits and employees' meals.

The general tendency, indicated by the Harris, Kerr, Forster and Company (32) studies on pin-pointing profits, is to present the various labor costs in sequence on the profit and loss statement. The percentages are individually computed and presented for each of these costs.

<u>Managerial wage</u>

Ashe (3) reported that it is common for small operators to mistake for business profits the wages which they have actually earned but which they have omitted from payroll records. When the operator realizes that a profit should represent returns over and above a compensation for personal services, he has made the first important step toward analyzing his business with a view to attaining a profit-on-investment figure. Ashe explained that income tax regulations prohibit the deduction of salaries of proprietors as an expense item in arriving at profit or loss. However, the profit figure is exaggerated when the managerial wage is omitted from the labor cost.

Horwath and Horwath (35) and Brodner and co-workers (10) agreed that if the proprietor is active in the business, a reasonable amount should be included in the labor figure for his services. This figure should not exceed the amount which would be paid to another person employed to perform the same services. It is evident that the only way to arrive at a realistic labor figure on the profit and loss statement is to include a fair wage figure for the proprietor commensurate with the services he contributes to the business.

<u>Employees' meals</u>

Horwath and Horwath (35) indicated that it is unnecessary for small restaurants to show a separate expense classification on the profit and loss statement for the estimated cost of the employees' meals and a comparable deduction from the food cost. Rothman (62) seriously objected to the practice of recording as sales the value of meals furnished employees without actual charge. Such a practice would increase such expenses as sales taxes and rental charges if these are computed on the basis of sales. In addition, the inflation of the sales figures would affect the validity of all operating cost percentages. The food cost percentage is, for many operators, the most important basis for comparison of operating efficiency of one organization with another. If methods of accounting vary, comparisons may be misleading and confusing. When employees actually pay for their meals, Rothman suggested that this payment be included in the gross receipts.

Inventory Practices

Brodner (8) and Stokes (68) related that sound accounting methods require physical inventories at monthly intervals. The National Association of Cost Accountants (48) emphasized that the net change in inventory values affects the cost of the goods sold. Every dollar added to or deducted from the inventory is a dollar added to or deducted from profits. This effect is readily understood but frequently not fully appreciated. Carlson (14) found that 8 of the 20 Michigan resorts which she studied reported that no monthly inventory of foods was taken.

The National Association of Cost Accountants (48) emphasized the importance of proper inventory procedures with the following statement:

> Inventories have been called the 'graveyard of American business' because they have so frequently been the prime cause of business failures. Either they have been allowed to grow to unwieldy and impossible size, with consequent loss of liquidity and impaired current position; they have contained an ill-assortment of poorly chosen or obsolete goods which have suffered tragic losses in value or are quite unsaleable; or price speculations have been undertaken with disastrous results.

Since 1942 an added stimulus to inventory taking has been provided by the federal government. Ceiling Price Regulation 134 (9, 52) requires that the restaurant operator prepare a record of the inventory of food and beverages at the end of each designated quarter. This record must be kept available for inspection for two years. Schensul (4) and Brodner and co-workers (10) advocated the maintenance of perpetual inventory records in addition to periodic physical inventories. In a survey of opinions of prominent restaurant operators, conducted by American Restaurant Magazine, Schensul stated that he considered perpetual inventory and stock control essential to tight cost control methods. Perpetual inventory records may help to decrease theft, reduce the amount of dead items and spoilage on the storeroom shelves, make possible daily food cost calculation, encourage employees to be business conscious and facilitate effective buying.

Brodner and co-workers (10) added that perpetual inventories may also serve as references in ordering, aid in menu making, show amounts of low and high cost foods consumed and eliminate the necessity for taking monthly inventories. However, they acknowledge that it is unusual for restaurants to maintain perpetual inventory records of all food stocks.

Depreciation

Ashe (2) estimated that 50 to 75 per cent of the investment of the typical restaurant may be in the form of depreciating assets. If this business investment is to remain unimpaired, the operator must recognize the depreciation of these assets. Dahl (19) noted that this investment in equipment challenges the financial soundness of a restaurant conducted on a bash basis. Brodner (8) pointed out that depreciation expense should not be ignored or considered only as a legitimate deduction from profit for income tax purposes. The normal wear and tear on equipment may be very expensive. Ashe (2) warned that the depreciation allowable for income tax purposes may be insufficient to keep the investment unimpaired at current high replacement costs. Brodner (8) concluded that some reasonable deduction for depreciation must be shown on the profit and loss statement.

Bookkeeping Procedures

Many operators do not keep adequate records. The United States Department of Commerce (67) conducted a survey of the record keeping procedures employed by small businessmen in Philadelphia. The results of the study are summarized in the following table.

Types of records maintained	Per cent of total
No business records at all	28
Files of bills only	15
Some form of single entry records	49
Full sets of double entry books	8
Total	100

Primary reasons given for the lack of satisfactory records were the excess work load of the proprietor and the lack of time, knowledge and patience.

Since many small businessmen cannot afford the services of a full time bookkeeper, the keeping of business records is neglected. In the study previously cited, only 7 per cent of the Philadelphia businessmen who kept records employed a full time bookkeeper.

Simplicity

McMahon (42) maintained that the major function of accounting is to aid management in achieving its objectives. It is a means to an end, not an end in itself. Brodner (9) admitted that undoubtedly some systems fall of their own burdensome weight. Stokes (68) emphasized that the profit and loss statement should be simple and tailored to the needs of the particular operation.

Truempy II (69) felt that designing accounting systems for the small operation is a challenge. The system must, of necessity, be kept as simplified as possible. Yet, it must provide the financial information essential for sound management.

McNamara (43) stressed that accounting systems should provide for a presentation of the food cost within 10 days after the end of the accounting period. Brodner and co-workers (10) concluded that useful, informative operational data must be provided as quickly as possible so that necessary corrective measures can be taken to assure effective control.

METHOD OF PROCEDURE

Operations Studied

Since the 1948 census showed that 96.7 per cent of all eating and drinking places in Michigan were single units, this study was limited to this kind of operation.* The YMCA and YWCA food services were included since they are independently operated. It was felt that the operations studied were representative of the eating places in Michigan. However, the sample was not large enough (.21 per cent of the total number of eating places in Michigan in 1948) to warrant statistical analysis.

The practices followed in the preparation of profit and loss statements of the following commercial food service operations were studied.

1. Arizona Restaurant
2. Bennetts
3. Benny's Drive-In
4. Bill's Lunch

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* The bureau of the census classed a store as a single unit if it was operated by a firm which operates only one store, or no other store in the same general kind of business as the store concerned (72, 73).

5. The Crest Restaurant
6. Curtis-Everett Company
7. Estill's Cafeteria
8. Famous Grill Inc.
9. Hollister Coffee Shop
10. The Jack Pot Incorporated
11. Nuggett Dairy Grill
12. Odam's Dining Room
13. Pagoda
14. Varsity Drive-In
15. YMCA
16. YWCA

This study was limited to restaurants in the vicinity of Lansing, Michigan to provide opportunity to use the personal interview technique.

The Interview

Personal interviews were conducted to obtain accurate information from the operators. The interview guide, which the interviewer used to assist him in directing the interview, is included on the following page.

The interview was begun with a brief, informal introduction. Detailed introductions were avoided since it was felt that they might confuse the operator and delay

Interview Guide

NAME

How often is the profit and loss statement prepared? ______________

Does the percentage base include the sales tax? ______________

ITEMS INCLUDED ON THE PROFIT AND LOSS STATE.	HOW OFTEN EXPENSE CALCULATED	HOW OFTEN % PRESENTED	HOW OFTEN % COMPARED	% CHANGE FELT SIGNIFICANT
FOOD COST (extent of detail presented)				
___	___	___	___	___
___	___	___	___	___
___	___	___	___	___
LABOR COST	___	___	___	___
Proprietor's wage included?_______				
Management's P/R tax contribution included?_______				
OTHER EXPENSES (extent of detail presented)				
___	___	___	___	___
___	___	___	___	___
___	___	___	___	___
___	___	___	___	___
___	___	___	___	___
Employees' meals?	___	___	___	___
Depreciation?	___	___	___	___

Actual food cost %_____ Actual Labor Cost %____

How often inventory taken?_____ Constant amount
Perpetual inventory taken?_____ kept on shelves?_______

Who prepares the statement?__________ Double entry?______
Who set up the accounting system now in use?____________

$ volume of business_____________

Check book kept?_______ Cash disbursements book kept?_______
How are bills paid?_______________

How are menu prices set?______________

the establishment of rapport. The questionnaire was not introduced until the interview had proceeded to the point at which the interviewer felt that this could be done informally. The need for this discretion varied with individual operators. The interviewer received the general impression that the operator who was aware of the practices he should be observing but which he was not following, was the operator who required the most informal approach. In no case was the questionnaire introduced before rapport appeared to be established.

When the progress of the interview led to a particular sequence of questions, that natural order was followed. The tone of the interview was kept informal in the hope that frank answers would be elicited.

Examination of the Profit and Loss Statements

The interviewer obtained permission to examine the forms used for presenting profit and loss statements. Bingham and Moore (5) asserted that the straight forward statement of purpose, followed with reasonable requests, is generally the most effective means of securing information which might be considered somewhat confidential. This approach was employed by the interviewer.

The profit and loss statements were studied to support the questions answered in the interview, to procure details which the operator had not been able to recall and to reduce the possibility of confusion in terminology. These inquiries were an aid in the accurate recording of data since information such as the treatment of sales tax and the extent of detail presented on the profit and loss statements were usually obvious from a perusal of these statements.

DISCUSSION OF RESULTS

Some of the operators requested that the information which they provided be treated as confidential. Since the identification of any particular operation with the practices employed would be valueless, the names of participating operations will not be used in this discussion.

The statements of 12 operations were examined. In some instances it was possible to collect the desired information without seeing the statements, but it would have been impossible in other situations to collect accurate information without examining the results of a certified audit. A summary of the information obtained from the operators is presented in Table 5 in the Appendix.

Frequency of Preparation of Profit and Loss Statements

Thirteen of the operations prepared monthly profit and loss statements. One operation prepared statements once every four weeks. This four week statement was supplemented by a weekly statement which did not take inventory changes into consideration. One operation prepared statements three times a year, and one operation prepared them twice a year.

Expense Distribution

Twelve of the operators' statements were examined. Each of these statements presented food cost as a deduction from sales to present a gross profit figure. Three of these statements presented a distribution of the food cost into 5, 6 and 2 classifications respectively. Four of the operators prepared occasional food cost distributions but did not include them on the profit and loss statement.

Each of the statements examined presented salaries and wages as a separate expense classification. Ten of the 12 statements examined presented no particular arrangement of the other expenses. Judging from the results of the personal interview, the investigator concluded that the statements of the four operations not examined probably followed this pattern also.

The eleventh statement classified expenses under two groupings, non-controllable expenses and controllable expenses. The twelfth statement studied presented miscellaneous income and expense as an adjustment in net operating profit.

Food and labor expenses are excluded from the balance of this discussion of expense distribution. The sales tax is included in the following discussion for those cases in which it was treated as an expense on the profit and loss statement.

The number of expense classifications on the statements varied from 7 to 30. Table 5 provides a more detailed presentation of the expense classifications employed by the operators. Practices varied from operation to operation. The operations with the greatest volume of sales generally employed the larger number of expense classifications.

Comparative Figures

Fifteen of the operators indicated that they computed monthly or weekly food cost and labor cost percentages, although these percentages were not necessarily presented on the profit and loss statements each time the statements were prepared.

Eleven of the operators who computed their food cost percentages presented their statements for examination by the interviewer. The following discussion refers only to those percentages which were presented on the profit and loss statement each time the statement was prepared.

Ten of these 11 operators presented food cost percentages on their profit and loss statements. Nine of these 10 operators also presented the labor cost percentages on their statements. Nine of the 12 statements examined presented both food cost and labor cost percentages.

Four of these 9 statements also presented percentages for each of the other expenses shown on the statement. Three of these 4 statements represented operations which had estimated gross sales of $100,000 or more during 1951.

A fifth statement presented percentages for maintenance, rent, depreciation, utilities, insurance and telephone expenses. A sixth statement presented one percentage figure for the total of all of the operating expenses.

Three of the 9 statements examined, which presented both food cost and labor cost percentages, did not regularly present any other percentage computations.

Percentage base

Ten of the 12 statements examined presented percentages on the statements. Six of these 10 statements included receipts from sales tax in the percentage base. One of these six statements excluded miscellaneous income from this base and presented miscellaneous income as an adjustment to the net operating profit.

The seventh statement presented juke box receipts as an addition to the gross profit figure. However, the only form of miscellaneous income which was not included in the percentage base was income from the juke box. This statement included the employees' meal allowances in the base figure.

The other 3 of these 10 statements included miscellaneous income in the base figure. In no instance did any of these 10 statements present a percentage base which did not include either miscellaneous income or sales tax collections or the employees' meals allowances.

Influence on managerial action

It was difficult to estimate the influence of the profit and loss statements upon managerial action. Fifteen of the operators computed their food cost and labor cost percentages each month. This did not indicate the number of operators who based corrective action upon monthly comparisons of the food cost and labor cost percentages nor did it indicate the number of operators who utilized their statements to facilitate those comparisons.

Table 1 presents the variations of the food cost percentage indicated by the operators as tolerable. Table 1 also presents the food cost percentages intended by the operators and those attained by the operators according to statements examined by the interviewer.

Table 1. Food cost percentages. Cost of employees' meals was deducted from food cost figures marked by *.

Operation	Food cost percentages		
Code number	Intended	Actual	Increase indicated as tolerable
1	40-45	53	-
2	40	40-42	2
3	38-40	40.1	2
4	-	over 50	-
5	-	49-52	-
6	40	41	-
7	45	45	1
8	42-43	42	over 43
9	-	*44	-
10	-	-	-
11	50	*47-50	over 54
12	-	47	-
13	-	50	-
14	40	47	-
15	40	50	over 50
16	47 implied	47.8	over 47

Four of the 6 operators who attained a food cost percentage of 45 or less indicated an increase of the food cost percentage which they felt to be tolerable. These particular expressed percentages indicated that the operators felt a percentage exceeding 45 or varying more than 2 was not tolerable. Five of these 6 operators had indicated a food cost percentage which they considered desirable. This implied that the operators who attained food cost percentages of 45 or less employed percentages to guide them in the management of their operations.

The other 9 operators, who determined food cost percentages, reported actual percentages of 47 or above. Only 3 of these operators had indicated increases which they felt to be tolerable. Only 5 indicated a food cost percentage range which they considered desirable. The intended percentages were either high or seemed to be only an expression of the 40 per cent food cost which the operators felt would be considered an acceptable standard. This information seemed to indicate that the operators who had high food cost percentages were not making effective use of food cost percentages as management aids.

Table 2 presents the labor cost range indicated by the operators as tolerable. Table 2 also presents the labor cost percentages intended by the operators and those attained by the operators according to the statements examined by the interviewer.

A discussion of labor costs comparable to that given for food cost percentages is not practical because of the bias introduced by the exclusion of managerial wages from the labor cost percentages. However, it should be noted that a range from 18 to 50 was reported in the labor cost percentages.

Table 2. Labor cost percentages. Managerial wage was not included in the labor cost figures marked by *.

Operation	Labor cost percentages		
Code number	Intended	Actual	Range indicated as tolerable
1	-	*25	-
2	-	*38	-
3	25	*25-26	2
4	-	*35	-
5	25	30	-
6	-	37.6	-
7	31-32	32	± 2
8	47	47-50	over 50
9	-	*27	2
10	-	*18	-
11	-	30	over 34
12	-	*20	5
13	-	*21	-
14	25	*37	-
15	-	*20	over 20
16	-	*25	over 25

There was some evidence of inability of various operators to utilize the profit and loss statement as a basis for corrective action. This was suggested by some of the high labor cost percentages reported and the 12 per cent difference found between desired and experienced percentages in one operation.

The sums of the actual food cost and labor cost percentages are presented in Table 3. These sums indicate

Table 3. Sums of the actual food cost and labor cost percentages. Managerial wage was not included in the cost figures marked by *.

Operation code number	Sum of the actual food cost and labor cost percentages
1	*78
2	*78-80
3	*65.1-66.1
4	*85
5	79-82
6	78.6
7	77
8	89-92
9	*71
10	-
11	77-80
12	*67
13	*71
14	*84
15	*70
16	*72.8

the dangerous financial condition of several operations. Food and labor cost percentages totaling 80 or more, excluding managerial wage as a labor expense, and corresponding percentages of 90 or more, including managerial wage, may indicate inadequate managerial control.

The interviewer had the impression that 5 of the 16 operators interviewed maintained up-to-date statements of profit and loss, based on periods of a month or 4 weeks, which they realistically utilized to compare food cost and labor cost percentages of different operating periods. Four of these 5 operations reported estimated gross sales of more than $100,000 in 1951.

Three operators indicated that other expense percentages were regularly compared. One operator said he gave special attention to utilities, advertising, and laundry expenses. He considered 2.5 per cent a desirable level for advertising expense and 0.5 per cent the maximum variation which he felt permissible.

The second operator stated that he felt 0.5 per cent was the maximum laundry expense variation allowable. The third operator gave special attention to maintenance, rent, depreciation, utilities, insurance and telephone. This operator did not express any specific variations which he felt were critical. Two of these three operators reported estimated gross sales of more than $100,000 in 1951.

From the findings of this study it appeared that the small operators may not have utilized their profit and loss statements as comparative aids in the management of their operations.

Labor Costs

One operator included the cost of the employer's payroll tax contributions in the salaries and wages figure and in the labor cost percentage. None of the other operators included their payroll tax contributions in either of these figures.

Every figure for salaries and wages presented on the profit and loss statements represented the expense which was the base for the labor cost percentage.

Managerial wage

Eleven of the operators did not include a wage for the proprietor in the figure for salaries and wages. This seriously distorted labor cost percentages for comparative purposes. Every operator who attained a labor cost percentage of 27 or less had omitted a wage for the proprietor in the labor cost figure.

Five of the 6 operators who attained a labor cost percentage of 25 or less reported operations in which the estimated gross sales were less than $60,000 in 1951.

Five of the 7 operators who reported estimated gross sales of $60,000 or less in 1951 attained a labor cost percentage of 25 or less. Only one of the operators who reported estimated gross sales of more than $60,000 in 1951 attained a labor cost percentage of 25 or less.

This implied that perhaps the lower labor cost percentages represented were attributable to the exclusion of the wages of management from the labor cost figure rather than to efficient operating methods.

Employees' meals

One operator included the employees' meal allowances in the figure for salaries and wages and in the labor cost percentage. The sales were increased proportionately to compensate for the increase in the recorded labor cost.

Another operator included the amount of the employees' meal allowances in the salaries and wages figure and compensated for this charge by deducting a like amount from the food cost on the profit and loss statement. This operator was the only one who presented the employees' meal allowance on the statement in a form which distinguished this allowance from the other expenses.

A third operator charged the employees a fixed amount each week for the meals eaten on the premises. The amount of this charge was deducted from the food cost.

A fourth operator paid his employees a weekly stipend in lieu of a meal allowance. This additional payment was included in the salaries and wages figure and in the labor cost percentage. These employees purchased the items they desired at the regular sales price. These sales were recorded as regular customer cash sales.

None of the other operators included the employees' meal allowances in the salaries and wages figure, in the labor cost percentage or in the sales figure.

Inventory Practices

Only one operator maintained a perpetual inventory. This inventory was used in the computation of food cost percentages independent of figures on the profit and loss statement. The inventory presented on the profit and loss statement was a fixed figure which remained constant from month to month. This operator readily admitted that he did not consider the profit and loss statement of any value to him in controlling his costs. The profit and loss statement was prepared solely to meet government regulations.

The frequencies with which physical inventories were taken are recorded in Table 4.

Table 4. Frequency of calculation of physical inventories. Inventory figure marked by * was not presented on the profit and loss statement.

	Inventory intervals							
	1 wk	4 wk	1 mo	3 mo	4 mo	6 mo	1 yr	indefinite
Number of operators who observed given intervals	*1	1	5	3	1	0	2	3

Six of the operators did not comply with the Office of Price Stabilization regulations which require that a quarterly inventory be taken.

To explain the infrequent calculation of physical inventories the operators indicated that they did not have sufficient time and that their inventory value did not fluctuate from month to month. The validity of the argument that a constant inventory was maintained was questionable. One of the operators who regularly calculated inventories estimated value fluctuations of $200. Three more operators estimated value fluctuations of plus or minus $200 to $300. Another of the operators estimated value fluctuations of $1,000 from month to month. These fluctuations could render food cost percentages useless as managerial aids.

Depreciation

Fourteen of the operators computed depreciation at least once a year. Eight of the statements examined by the interviewer presented depreciation each time the statement was prepared. The statements of the other six operators presented depreciation once a year.

Bookkeeping Procedures

Three of the food service operations employed the bookkeeping services of the organization from which the premises were leased. In this report these food services have been included among those which use the services of a bookkeeping agency. Eleven of the operations, including the organizations just described, employed the services of bookkeeping agencies to maintain their records and prepare periodical statements. Three of these operations supplemented the information provided on these statements with information provided by the operator or his wife. Five of these operations had estimated gross sales which exceeded $100,000 in 1951.

Three of the operations relied upon the operator or his wife to assume all of the responsibility for the record keeping of the operation. The two other operations hired bookkeepers to maintain all of the records of the operation.

The profit and loss statement which was prepared for one of the organizations was based on records which had been maintained on a single entry basis. The other profit and loss statements were based on records which had been maintained on a double entry basis, the system generally preferred by bookkeeping agencies which prepared statements for 11 of the organizations.

All of the operations maintained checkbooks. However, the only operations which maintained any other form of cash disbursement books were those which assumed part or all of the responsibility for presenting complete periodical profit and loss statements.

Three of the 11 operations which employed the services of a bookkeeping agency submitted all of their paid bills once a week to that agency to be recorded. Seven of the 11 operations submitted their paid bills once a month to be recorded. The eleventh operation recorded its own bills with the exception of rent and payroll which were computed and recorded by the bookkeeping agency.

Fifteen of the operators designated the frequency with which most of the bills were paid. Six of these operators reported that bills were paid when the goods were delivered. Four reported that bills were paid weekly, and the other 5 reported that bills were paid once a month.

Food Service Record Book

A simplified record book, planned to facilitate the preparation of a periodical profit and loss statement, was prepared by the investigator in this study. The limitations presented by the data from this study were considered in the design of this record book. An attempt was made to present a system so simplified that the operator may maintain his own records with a minimum of time and effort and yet arrive with a meaningful profit and loss statement.

The tentative book was planned for mimeographing on 8.5 inch by 15 inch paper. In setting up an acceptable record book two chief objectives were to minimize the amount of the explanation necessary and to present directions so comprehensive that personal contact would not be necessary to introduce the system.

A single entry system is presented. It could be converted easily to a double entry system by persons who prefer to maintain double entry records.

Simplicity

This system has adopted a coding procedure to enable the operator who is unfamiliar with record keeping procedures to maintain his own records. This procedure was intended to eliminate the necessity of study by the operator of a text on bookkeeping principles and procedures.

Frequency

Provision has been made for daily recording of receipts and expenditures. The frequency of recording could be modified to meet the bookkeeping policies which the individual operators might wish to adopt. Provision has also been made for recording bills which might be unpaid at the end of each accounting period. Such a provision makes allowances for the preparation of a more accurate profit and loss statement than does a system which is based solely on cash transactions.

This system has been set up to provide a monthly profit and loss statement. However, any desired accounting period may be represented by the profit and loss statement if separate receipts and disbursements records are maintained for each period.

The profit and loss statement form provides for the presentation of three monthly profit and loss statements in addition to the quarterly statement. Since the Office of Price Stabilization requires that quarterly records be maintained, the inclusion of this quarterly statement seemed advisable.

Expense distribution

This system allows for 13 expense classifications in addition to sales tax, food cost, payroll, employer's payroll tax contributions and depreciation expense classifications.

Additional expense distributions may be employed by the operator who wishes to extend his current purchases and expenses form to provide more columns for expense distribution.

No provision has been made for the distribution of food purchases into detailed expense classifications. This may be accomplished, if desired, by the substitution of food classification columns for expense classification columns on the current purchases and expenses sheet.

The proposed system advocates that a checkbook be maintained to provide a record of the cash balance in the bank and a supplementary record of cash disbursements. This should make it possible to compare the cash balance presented on the cash receipts sheet with the cash on hand.

Comparative figures

This system provides for the monthly and quarterly computation, presentation and comparison of the percentage of food cost, payroll cost and various other costs of operation.

Sales taxes and miscellaneous income are automatically eliminated from the percentage base. This should facilitate comparison with the operating percentages reported by commercial food service operators from all regions of the United States.

Labor costs

This system presents payroll cost and the employer's payroll tax contributions as separate but subsequent expenses on the profit and loss statement.

The proposed system recommends that the managerial wage be included in the payroll cost shown on the profit and loss statement.

No provision has been included in the record book for a separate presentation of the cost of the employees' meals on the profit and loss statement.

Inventory practices

The proposed system encourages the presentation of the value of the current inventory on the monthly profit and loss statement. A sample inventory sheet has been included in the record book. Provision has been made for the inclusion of inventories on both the monthly and the quarterly profit and loss statements.

Depreciation

This sample record book includes a depreciation schedule and instructions for the calculation of monthly depreciation. A depreciation expense classification has been included on the profit and loss statement.

SUMMARY AND RECOMMENDATIONS

Adequate records are important contributing factors in the successful management of a business organization. This investigation was conducted with the hope that the findings might serve as a basis for setting up a modified bookkeeping system which would be practical, workable and acceptable to the commercial food service operators in Michigan.

The practices of selected Lansing commercial food service operators in the preparation of profit and loss statements were studied. To acquire accurate information personal interviews were conducted with 16 individual operators. The profit and loss statements of 12 of the operations were also examined.

Fourteen of the operations prepared statements monthly or once every four weeks. Each of the statements examined presented food cost and salaries and wages expenses. The number of other expense classifications presented on the statements varied from 7 to 30.

Nine of the 12 statements examined presented both food cost and labor cost percentages each time the statement was prepared. Three of these statements presented no other expense percentages regularly. A variety of practices were employed in the inclusion of items such as miscellaneous income, sales tax collections and employees' meal allowances in the percentage base.

The influence of the profit and loss statement on managerial action is difficult to estimate. However, the results of the study seemed to indicate that those operators who had high food cost percentages were not making effective use of the information on the profit and loss statement as management aids. In addition, the labor cost percentages indicated an inability of various operators to utilize the profit and loss statement as an aid in the control of labor costs.

The sums of the actual food cost and labor cost percentages indicated the dangerous financial condition of several operations. From the findings of this study it appeared that the small operators may not have utilized their profit and loss statement as a comparative aid in the management of their operations.

Every figure for salaries and wages presented on the profit and loss statements represented the expense which was the base for the labor cost percentage. Eleven of the operators did not include a wage for the proprietor in the figure for salaries and wages. There was an implication that the low labor cost percentages reported were attributable to the exclusion of the wages of management from the labor cost figure rather than to efficient operating methods. Twelve of the operators excluded the employees' meal allowances from the salaries and wages figure, the labor cost percentage and the sales figure.

None of the operators maintained a perpetual inventory which was represented on the profit and loss statements. Six of the operators did not comply with the Office of Price Stabilization regulations which require that a quarterly inventory be taken. Six of the operators took an inventory at least once a month to provide a current inventory figure for the profit and loss statement.

The statements of 14 of the operations included a depreciation allowance at least once a year. Eight of the statements examined by the interviewer included depreciation allowance each time the statement was prepared.

Eleven of the operations employed the services of bookkeeping agencies to prepare periodical statements. Two of the other operations employed bookkeepers to maintain all records of the operations. Therefore, it was not surprising that 15 of the operations had statements which were based on double entry records.

A simplified record book, planned to facilitate the preparation of a periodical profit and loss statement, was designed by the investigator in this study. The limitations presented by the data from this study were considered in the design of this record book.

An additional study might be conducted to determine the adaptability of the proposed record book to small commercial food service operations in Michigan. The simplified record book presented, or a modification of it, might be tested to determine the extent to which it is practical, workable and acceptable to the small commercial food service operator. Seasonal operations, such as resorts, might be desirable organizations in which to conduct this study. In these seasonal operations the proposed system could be introduced before the season begins. These operations might provide a short cycle for a convenient testing basis.

LITERATURE CITED

1. American Institute of Accountants. Case studies in auditing procedure no. 8: A steel fabricating company, a small restaurant. New York, American Institute of Accountants. 1950.

2. Ashe, Harold J. Watch your replacement reserves. Amer. Rest. Mag. 34, No. 12: 37,92-96. 1950.

3. Ashe, Harold J. What is profit? Amer. Rest. Mag. 33, No. 5: 104. 1950.

4. Best control for costs: eagle eye of management. Institutions Mag. 24, No. 2: 2,66,67. 1951.

5. Bingham, Walter Van Dyke, and Moore, Bruce V. How to interview, 3rd revised ed. New York, Harper and Brothers. 1941.

6. Boyd, Ralph L. and Dickey, Robert T. Basic accounting. New York, Rinehart and Company Inc. 1949.

7. Bradshaw, T. F. Institutional food cost control under wartime conditions. J. Am. Diet. Assn. 19: 413-415. 1943.

8. Brodner, Joseph. Accounting for restaurants. In Lasser, J. K. Handbook of accounting methods, 1083-1097. New York, D. Van Nostrand Company Inc. 1943.

9. Brodner, Joseph. Institution food accounting and control problems. J. Am. Diet. Assn. 17: 771-777. 1941.

10. Brodner, Joseph, Carlson, Howard M. and Maschal, Henry T. Profitable food and beverage operation. New York, Ahrens Publishing Company, Inc. 1951.

11. Bryan, Mary de Garmo, MacFarlane, Alberta M. and Hawkins, E. R. Establishing and operating a restaurant. U. S. Department of Commerce, Washington, D. C. Industrial (Small Business) Series No. 39. 1946.

12. Bryan, Mary de Garmo. The school cafeteria, 2nd ed. New York, F. S. Crofts and Co. 1946.

13. Carlson, Howard M. The pre-cost method of building food profits. Transcript. 6, No. 2: 1,6-8. 1949.

14. Carlson, Odessa Lorraine. A study of twenty resorts located in the upper peninsula of Michigan. Unpublished M. S. thesis. East Lansing, Michigan, Michigan State College Library. 1952.

15. Cecil, Brice. Essentials of cashiering. New York, Ahrens Publishing Company, Inc. 1947.

16. Controls compute profit maximum on cost factor. Institutions Mag. 24, No. 7: 74-77. 1951.

17. Cost Analysis. Institutions Mag. 24, No. 7: 22. 1951.

18. Curtis, Elsabelle. How to cut labor costs. New York, New York State Restaurant Association. 1949.

19. Dahl, Joseph O. Restaurant management. 4th ed. New York, Harper and Brothers Publishers. 1944.

20. Eck, Ella M. A food cost control system in a dietary department. J. Am. Diet. Assn. 19: 98-100. 1943.

21. Elwell, Fayette Herbert. Elementary accounting for colleges. New York, Ginn and Company. 1945.

22. Esperson, Henry W. Methods of food control. Amer. Rest. Mag. 30, No. 7: 54,62,96-100. 1947.

23. Esperson, Henry W. The need for precosting menus. Amer. Rest. Mag. 31, No. 7: 42,111-113. 1948.

24. Expert defines positive cash control methods. Institutions Mag. 23, No. 8: 88-90. 1950.

25. Fair, Ernest W. Cash register boners are costly. Amer. Rest. Mag. 32, No. 10: 50,56. 1948.

26. Fandos, Micheal. A study of food expenditures in a commercial cafeteria and a comparison with established standards. Unpublished M. Bus. Ad. report. Chicago, Illinois, University of Chicago Library. 1950.

27. Fleischman, Ernest H. How to cut food costs. rev. ed. New York, New York State Restaurant Association. 1951.

28. Forster, William J. Make your figures do double duty. Transcript. 9, No. 7: 1,6,7. 1952.

29. Gray, Madeline, and Padua, Vass De Lo. How to be a success in the restaurant business. Enlarged and revised edition. New York, Greenberg Publisher. 1948.

30. Gray, Madeline, and Padua, Vass De Lo. How to cook for profit. New York, Greenberg Publisher. 1947.

31. Harris, Katherine W., and Wood, Marion A. Meals for many. Ithaca, New York. New York State College of Agriculture. Cornell University Bulletin 477. 1942.

32. Harris, Kerr, Forster and Company. Pin-pointing your profits. Rest. Mgt. 69, No. 1: 30-31. 1952.

33. Hatfield, Henry Rand, Sanders, Thomas Henry and Burton, Norman Lee. Accounting principles and practices. Chicago, Ginn and Company. 1940.

34. Heine, Paul L. H. Food sales, unlimited. New York, Ahrens Publishing Company, Inc. 1952.

35. Horwath, and Horwath, Restaurant and hotel accountants and consultants. Record keeping simplified for the small restaurant and uniform classification of accounts for the average restaurant. Chicago, National Restaurant Association. 1952.

36. Horwath, Ernest B. and Toth, Louis. Hotel accounting. rev. ed. New York, The Ronald Press Company. 1948.

37. Husband, George R., and Schlatter, William J. Introductory accounting. New York, Pittman Publishing Corporation. 1949.

38. Lasser, J. K. How to run a small business. New York, McGraw-Hill Book Co. 1950.

39. MacDougal, Alice Foote. The secret of successful restaurants. New York, Harper and Brothers. 1929.

40. McKinley, Marjorie M. Food cost control. J. Am. Diet. Assn. 24: 847-853. 1948.

41. McKinsey, James O. Managerial accounting. Chicago, University of Chicago Press. 1924.

42. McMahon, Grace. Dietary consultation - a service for small institutions. VIII food cost accounting. J. Am. Diet. Assn. 27: 302-308. 1951.

43. McNamara, James E. Controlling a restaurant's food cost. Amer. Rest. Mag. 32, No. 6: 45,70. 1948.

44. Madge, A. V. Restaurant cash control. Chicago, National Restaurant Association. 1945.

45. Michigan Department of Revenue. Sales tax act. Act 167 P. A. 1933, as amended. Use tax act. Act 94, 1937, P. 129, as amended. Lansing, Michigan, Paul DeKleine Company. 1951.

46. Michigan Department of Revenue. Sales and use tax official return forms for the year ending June 30, 1953. ST & UT-52-53. Lansing, Michigan, Michigan Department of Revenue. 1952.

47. Mishler, Mary Elaine. A study of school lunchroom accounting methods. Unpublished M. S. thesis. East Lansing, Michigan, Michigan State College Library. 1949.

48. National Association of Cost Accountants. The control and valuation of inventories. p. 1. New York, J. J. Little and Ives Co. 1941.

49. Neuner, John J. W. Cost accounting principles and practice. 3rd ed. Chicago, Richard D. Erwin, Inc. 1948.

50. Neuner, John J. W. and Neuner, Ulrich J. Accounting systems installations and procedures. Scranton, Pennsylvania, International Textbook Company. 1949.

51. Noble, H. S. Accounting principles. 4th ed. Cincinnati, South-Western Publishing Co. 1945.

52. Office of Price Stabilization. Ceiling Price Regulation 134. Eating and drinking establishments. Office of Price Stabilization Trade Guide. Washington, D. C. OPS-TG-46 CPR. 1952.

53. Orderly process routs bugaboo of stock taking. Institutions Mag. 23, No. 3: 23-25. 1950.

54. Parks, Doris. Daily food cost accounting: why and how. J. Am. Diet. Assn. 25: 684-686. 1949.

55. Podd, G. O. Significant ratios in present day restaurant operations. 60-70. In Conference course lectures on modernizing management methods in the restaurant industry. Chicago, National Restaurant Association. 1948.

56. Putnam, S. Grady. Restaurant inventory program. Amer. Rest. Mag. 31, No. 3: 23. 1947.

57. Radell, Neva Henrietta. Accounting and food control. New York, F. S. Crofts and Co. 1939.

58. Report from Washington - What you should know about new restaurant price freeze. Amer. Rest. Mag. 36, No. 5: 12,13,181. 1952.

59. Restaurant Ceiling Price Regulation 11. 100-110. In Natl. Rest. Assn. Addresses and discussion of the 32nd annual convention and exposition. Chicago, Monarch Printing & Publishing Corp. 1951.

60. Restaurant operators look at cost control. Amer. Rest. Mag. 32, No. 10: 23-34,42,71-86. 1948.

61. Roswell, Charles G. Trustee forum for effective use of financial data. The Modern Hosp. 71, No. 2: 92-94. 1948.

62. Rothman, Theodore. Wise accounting avoids undue tax on employee food. Institutions Mag. 24, No. 5: 118-119. 1951.

63. Scheps, Clarence. Accounting for colleges and universities. Baton Rouge, Louisiana State University Press. 1949.

64. Schwartz, Charles Melchoir. The problem of control of the small club. Transcript. 5, No. 8: 1, 6,7. 1948.

65. Seiler, William G. A survey of the distribution of food expenditures as a basis for food cost control in three restaurants. Unpublished M. Bus. Ad. report. Chicago, Illinois, University of Chicago Library. 1947.

66. Set up right records to keep in middle of profit road. Institutions Mag. 23, No. 3: 28-31. 1950.

67. Sevin, Charles H. Establishing and operating a bookkeeping service. U. S. Department of Commerce, Washington, D. C. Industrial (Small Business) Series No. 41. No date.

68. Stokes, John W. Use cost control principles to curb prices and payroll. Institutions Mag. 23, No. 8: 1,120,121,128,133. 1950.

69. Truempy II, John. Accounting systems for small hotels. Transcript. 5, No. 7: 8. 1948.

70. Tyson, Trudy. The requisition in food service. Transcript. 5, No. 10: 1,6. 1948.

71. U. S. Department of Commerce. Establishing and operating your own business. Bureau of Foreign and Domestic Commerce. Washington, D. C. Industrial (Small Business) Series No. 19. 1945.

72. U. S. Department of Commerce. U. S. Census of Business, 1948. Retail trade sales size. Bureau of the Census, Washington, D. C. Bulletin No. 2-R-2. 1950.

73. U. S. Department of Commerce. U. S. Census of Business, 1948. Retail trade single units and multiunits. Bureau of the Census, Washington, D. C. Bulletin No. 2-R-3. 1950.

74. U. S. Department of Labor. The outlook for women as food-service managers and supervisors. Women's Bureau. Washington, D. C. Home Economics Occupation Series, Bulletin No. 234-2. 1952.

75. Vatter, William J. Foundations of cost control. 49-60. In Conference course lectures on modernizing management methods in the restaurant industry. Chicago, National Restaurant Association. 1948.

76. Voegle, Walter O. Restaurant business. Boston, Bellman Publishing Co. 1946.

77. Wenzel, George L. Five easy ways to assure cost control. 2-17. In Natl. Rest. Assn. Addresses and discussions of the 29th annual convention and exposition. Chicago, Monarch Printing and Publishing Corp. 1948.

78. Wenzel, George L. How to maintain a 40% food cost. 55-73. In Natl. Rest. Assn. Addresses and discussions of the 29th annual convention and exposition. Chicago, Monarch Printing and Publishing Corp. 1948.

79. Wenzel, George L. How to maintain a 25% labor cost. 111-127. In Natl. Rest. Assn. Addresses and discussions of the 29th annual convention and exposition. Chicago, Monarch Printing and Publishing Corp. 1948.

80. West, Bessie Brooks, and Wood, Levelle. Food service in institutions. 2nd ed. New York, J. Wiley and Sons, Inc. 1945.

81. Wisconsin Restaurant Association. Approved accounting method. Milwaukee, Wis., Wisconsin Restaurant Association. 1948.

82. Wunderly, Ernest E. Good food control systems. Amer. Rest. Mag. 32, No. 12: 44,48-98-102. 1950.

APPENDIX

Table 5 Summary of information obtained from selected Lansing commercial food service operators

Operation Code Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<u>Statement</u> <u>Presentation</u>																	
Frequency of Statements																	
1 week						x											
4 weeks						x											
1 month		x	x	x	x		x	x	x	x	x	x	x	x	x		
4 months																	x
6 months																x	
Examined by Interviewer	yes	x	x	x		x	x	x	x	x	x		x	x			x
	no				x							x			x	x	
Prepared Primarily as Government Requirement	yes		x								x			x	-	-	
	no	x		x	x	x	x	x	x	x		x	x				x
<u>Details</u> <u>Shown</u> <u>on</u> <u>Statement</u>																	
Food Cost	yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Labor Cost	yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Food Costs Recorded																	
On statement		1	1	1	1	5	1	6	1	2	1	1	1	1	1	-	1
Computed but not on statement		14	11	0	0	0	9	0	0	0	0	0	0	0	0	7	0
Other Expense:																	
Classifications		17	17	9	-	14	28	30	16	25	9	-	16	7	-	-	26
Classification groupings		0	0	0	-	0	0	0	0	2	0	-	2	0	-	-	0
<u>Monthly</u> <u>Computations</u>																	
Food Cost Percentage	yes	x	x	x	x	weekly & 4-weekly	x	x	x	x		x	x	x	x	x	x
	no										x						
Presented on statement	yes	x	x	x		x		x	x	x		-	x	x		-	x
	no				x		x				x				x		
Labor Cost Percentage	yes	x	x	x	x	weekly & 4-weekly	x	x	x	x		x	x	x	x	x	x
	no										x						
Presented on statement	yes		x	x		x		x	x	x		-	x	x		-	x
	no	x			x		x				x				x		
Other Expense Percentages		0	0	0	0	14	0	30	0	1-for total expenses	0	0	6	7	0	-	26
Statements Compared																	
Every statement		x		x	-	x		x	x	x		x	x		-	-	x
Never			x								x			x			
Whenever brought up to date							x										

Table 5 (Continued)

Operation Code Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Percentages																	
Percentage Base Includes																	
Miscellaneous income	yes	x	x	x	-	x	x	x-except recov. on bad checks	x		-	-	x-except juke box	x	-	-	x
	no									x							
Employees' meal allowances	yes									x			x				
	no	x	x	x	x	x	x	x	x		-	x		x	x	x	x
Sales tax	yes	x			-	x	x	x		x	-	-		x	-	-	x
	no		x	x					x				x				
Percentages Compared																	
Food cost	yes	x	x	x	x	x	x	x	x	x		x	x		x	x	x
	no										x			x			
Labor cost	yes	x		x	x	x	x	x	x	x		x	x		x	x	x
	no		x								x			x			
Other (specific)		0	0	0	0	all	0	utilities laundry advertising	0	0	0	0	maintenance rent, phone utilities insurance depreciation	0	0	-	laundry
Food Cost Percentages																	
Intended		40-45	40	38-40	-	-	40	45	42-43	-	-	50	-	-	40	40	47 implied
Actual *Employees' meal cost excluded		53	40-42	40.1	over 50	49-52	41	45	42	*44	-	*47-50	47	50	47	50	47.8
Increase indicated as tolerable		-	2	2	-	-	-	1	over 43	-	-	over 54	-	-	-	over 50	over 47
Labor Cost Percentages																	
Intended		-	-	25	-	25	-	31-32	47	-	-	-	-	-	25	-	-
Actual *Managerial wage excluded		*25	*38	*25-26	*35	30	37.6	32	47-50	*27	*18	30	*20	*21	*37	*20	*25
Increase indicated as tolerable		-	-	2	-	-	-	± 2	over 50	2	-	over 34	5	-	-	over 20	over 25
Labor Costs																	
Employer's Payroll Taxes Included	yes								x								
	no	x	x	x	x	x	x	x		x	x	x	x	-	x	-	x
Employees' Meal Expense Shown on Statement	yes									x							
	no	x	x	x	-	x	x	x	x		x	x	part of labor cost	x	-	-	x
Employees Pay for Meals Eaten	yes				-	-						x					
	no	x	x	x			x	x	x	x	x		x	x	-	-	x

Table 5 (Continued)

Operation Code Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Inventory Practices																	
Frequency of Physical Inventory																	
1 week			x														
4 weeks						x											
1 month							x	x	x			x	x				
3 months				x						x					x		
4 months																	x
12 months					x											x	
None taken		x									x			x			
Constant Maintained	yes	-												x			
	no		x	$1,300-1,700	x	x	$ 700-1,300	$ 9,000-10,000	$1,000-1,200	x	x	$4,000-5,200	x		x	x	x
Perpetual Maintained	yes		x (However a constant value was shown on each profit and loss statement)														
	no	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x
Records Maintained																	
Statement Based on Double Entry Records	yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x
	no															x	
Statement Prepared by:																	
Bookkeeping agency		x	x	x			x	x	x	x	x			x	x		x
Bookkeeper					x	x											
Operator or wife				x			x		x			x	x			x	
Primary Period of Bill Payment:																	
Upon delivery		x	x		-								x	x	x	x	
Weekly					-	x				x	x						x
Monthly				x	-		x	x	x			x					
Other Records Kept																	
Check book	yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Cash disbursements book	yes			x	x	x						x	x			x	
	no	x	x				x	x	x	x	x			x	x		x
Disbursement Recording Period																	
Daily					-	x						-				-	
Weekly		x									x				x		
Bi-monthly													x				
Monthly			x	x			x	x	x	x				x			x

FOOD SERVICE RECORD BOOK

CASHIER'S DAILY REPORT Date___________

New reading	$_____	Ending cash	
Less: Old reading	$_____	balance on hand (10)	$_____
Gives: Total receipts (6)	$_____	Ending cash count (list on back)	$_____
Add: Balance-cash on hand at beginning of day	$_____	Cash over* or under (9)	$_____
TOTAL	$_____	*Treat cash over as income and cash under (show in red) as expense.	
Deduct: Cash paid out (7) (listed on back)	$_____		
Bank Deposits (8)	$_____		
TOTAL DEDUCTIONS	$_____		
Gives: Ending cash balance on hand (10)	$_____		

Receipts Summary		Amount	Guest Count
Meals:		$_______	
Breakfast		$_______	_______
Lunch		$_______	_______
Dinner		$_______	_______
		$_______	_______
		$_______	_______
		$_______	_______
TOTAL	(1)	$_______	_______
Candy & Tobacco	(2)	$_______	
Misc. Sales	(3)	$_______	Weather_______
TOTAL SALES	(4)	$_______	Comments_______
Other Receipts	(5)	$_______	
TOTAL RECEIPTS	(6)	$_______	Cashier's Signature_______

FOOD SERVICE RECORD BOOK

This book intends to furnish a complete, yet compact, picture of the results of the year's operations. Certain columns are numbered. The totals of these columns are to be carried to the indicated forms. Place these totals next to the corresponding number of the column from which they were taken. Follow the instructions on each form. You will automatically have a detailed monthly PROFIT AND LOSS STATEMENT.

CHECK BOOK It is recommended that a check book be kept. All checks drawn, and all deposits made, should be shown on your check book stub in order to have an accurate check on cash.

RECORDS OF INCOME AND EXPENSE

CASHIER'S DAILY REPORT This is the source of CASH RECEIPTS BOOK ENTRIES. List and describe, on the back of the report, all payments made from the drawer. These are all cash payments not made by check. List and describe all cash receipts. This includes money received on loan.

CASH RECEIPTS Enter daily receipts from CASHIER'S DAILY REPORT, (column 1-6). Enter under "Drawer Payments" (column 7) the total of all cash payments not made by check. This includes payroll, if it is paid from cash on hand. Treat "Cash Over" (column 9) as income and "Cash Under" (show in red) as expense. This will give you a balance (column 10) which agrees with the actual cash count at the end of the day. Be sure to show receipts from non-taxable transactions (loans, etc.) in "Other Receipts" (column 5) rather than in "Misc. Sales" (column 3). Carry the monthly totals of columns 1, 2, 3, and 9 to the monthly PROFIT AND LOSS STATEMENT.

CURRENT PURCHASES AND EXPENSES Record and distribute all current (this month's) expenses as they are paid, either from cash on hand or by check. A general guide to operating percentages and a general guide to food costs are given on the following page. Compare these percentages to your monthly PROFIT AND LOSS STATEMENT. Omit payroll and payroll tax payments. Carry them to the PROFIT AND LOSS STATEMENT directly from your PAYROLL REGISTER. Omit payments on bills which were listed on the previous month's CURRENT PURCHASES AND EXPENSES. Remember to show those payments in column 7 or in your CHECK BOOK in order to keep a correct cash balance. Omit sales taxes. They are carried to the PROFIT AND LOSS STATEMENT from line 24 of the Michigan Sales Tax and Use Tax Return. Numbers have been allotted (17-23) for other items which you may want to distribute in the blank columns. Always use the same number for one type of item. Some distributions which you may want to use are: Rent, China Silver and Kitchen Utensils and Advertising.

At the end of the month, record and distribute all of the remaining current unpaid bills under "Unpaid Bills". Thus all of this month's expenses will be included in this month's PROFIT AND LOSS STATEMENT.

Columns 11-23: Total this month's purchases and expenses. Carry the totals of these columns to the monthly PROFIT AND LOSS STATEMENT.

Column 25: Carry the total of this month's purchases of "Fixed Assets" to the DEPRECIATION SCHEDULE. Depreciation will be carried from there to the monthly PROFIT AND LOSS STATEMENT.

GENERAL GUIDE TO OPERATING PERCENTAGES

		Suggested Range		
Food Cost		40.0%	50.0%	
Salaries and Wages		25.0	30.0	
Rent		1.0	7.0	
Utilities		1.5	3.0	
Laundry		1.5	3.0	
Advertising		1.0	3.0	
Menus		.5	1.0	
Insurance & Taxes	11.15%	1.1	2.5	28.0%
Office Supplies		.5	1.0	
Depreciation		.7	3.0	
Replacement & Repairs		.5	3.5	
Maintenance		1.5	3.0	
Cleaning Supplies		.35	2.0	
Miscellaneous		2.0	3.0	
PROFIT		5.0% - or more		
TOTAL		100 %		

Keep total Food plus Payroll costs below 70-75 %. Above means danger.

GENERAL GUIDE TO FOOD COSTS

Based on a 40% Food Cost

Meat	12.4%	
Poultry	4.0	19.6%
Seafood	3.2	
Produce	4.8	
Groceries	9.6	14.4
Eggs	1.6	
Butter	1.6	6.0
Milk and Cream	2.8	
TOTAL		40.0% of Sales

Month________________________

CASH RECEIPTS

Date	MEALS						Tobacco & Candy	Misc. Sales	TOTAL SALES	Other Receipts (Loans etc.)	TOTAL RECEIPTS	Add: Opening Drawer Balance	Less:		Cash Over-Under*	Gives: Balance In Drawer
	Bkfst.	Lunch	Dinner			TOTAL (1)	(2)	(3)	(4)	(5)	(6)		Drawer Payments (7)	Bank Deposits (8)	(9)	(10)
1	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
2																
3																
4																
5																
6																
7																
8																
9																
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27																
28																
29																
30																
31																
TOTALS	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
						(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)	(9)	(10)

Carry totals of columns 1, 2, 3, & 9* to the monthly PROFIT AND LOSS STATEMENT.
* Add net "Cash Over" (9) to, or deduct net "Cash Under" (show in red) from "TOTAL RECEIPTS" (6).

Month_______________________

CURRENT PURCHASES AND EXPENSES

Date	Explanation or Dealer's name*	Food Purchases (11)	Cleaning Supplies (12)	Tobacco & Candy (13)	Laundry Uniform & Linen (14)	Utility & Fuel (15)	Repairs (16)	(17)	(18)	(19)	(20)	(21)	(22)	Misc. Expenses (23)	Fixed Assets (25)	TOTAL
1		$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
2																
3																
4																
5																
6																
7																
8																
9																
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26																
27																
28																
29																
30																
31																
Unpaid Bills																
	TOTALS	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
		(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(25)	

Carry totals of columns 11-23 to the monthly PROFIT AND LOSS STATEMENT. Carry total fixed assets purchased, column 25, to the DEPRECIATION SCHEDULE.
* If any item is paid by check note the check number in this column.

DEPRECIATION SCHEDULE

Description	Date Acquired	Original Cost (From 25)	Estimated Life (26)	This Year's Depreciation (27)	Total Previous Depreciation (28)	Total Depreciation to date (29)
		$		$	$	$
			TOTAL	$ (27)		

Depreciation is a real expense. The government allows it to be deducted from income for income tax purposes. The operator who ignores this is only cheating himself.

There are various ways of figuring yearly depreciation. (column 27) The simplest method is that of dividing the original cost of the asset, less estimated scrap value, by its estimated life. This is the method shown here (column 25 divided by column 26).

When the point is reached where the total depreciation to date (column 27 plus column 28) equals the original cost less estimated scrap value, then no more depreciation can be taken on that asset.

The monthly share of depreciation to be shown on the PROFIT AND LOSS STATEMENT is arrived at by dividing the total depreciation for the year (column 27) by the number of months that you are in operation during the year. This figure should be carried to the PROFIT AND LOSS STATEMENT each month.

INVENTORY RECORD

1. List the items under various groupings (Food, Supplies, etc.).
2. Include all of the goods on hand at the end of the month. Be sure that the bills for unpaid items have been included on the CURRENT PURCHASES AND EXPENSES sheet. If it is impossible to list every item, then at least list the major items.
3. Use the actual cost of the items or the present replacement cost, whichever is the lower, as the unit cost for valuing the inventory. This is the conservative method of valuing the inventory.
4. Carry the total inventory values (column 30) to the PROFIT AND LOSS STATEMENT.

Description	Quantity	Unit Cost	Total Value (30)
		$	$
		TOTAL	$ (30)

PROFIT AND LOSS STATEMENT

				Amount	%	Amount	%	Amount	%	QUARTERLY TOTAL Amount	%
	GROSS SALES - FOOD		(1)	$		$		$		$	
Less:	Michigan Sales Tax, per line 24 Sales Tax and Use Tax Return			$		$		$		$	
Gives:	NET SALES - FOOD	(A)		$	100 %	$	100 %	$	100 %	$	100 %
FOOD COST:	Beginning Inventory			$		$		$		$	
	Food Purchases		(11)								
	TOTAL										
Deduct:	Ending Inventory		(30)								
Gives:	COST OF FOOD SOLD	(B)		$	%	$	%	$	%	$	%
Gives:	GROSS PROFIT ON FOOD SALES (A)-(B) =	(C)		$	%	$	%	$	%	$	%
OPERATING EXPENSES:	Payroll (PAYROLL REGISTER)*			$	%	$	%	$	%	$	%
	Soc. Sec. Cont. (" ")				%		%		%		%
	Est. Unem. Comp. (3 % of Payroll)				%		%		%		%
	Cleaning Supplies		(12)		%		%		%		%
	Laundry Uniform & Linen		(14)		%		%		%		%
	Utility & Fuel		(15)		%		%		%		%
	Repairs		(16)		%		%		%		%
			(17)		%		%		%		%
			(18)		%		%		%		%
			(19)		%		%		%		%
			(20)		%		%		%		%
			(21)		%		%		%		%
			(22)		%		%		%		%
			(23)		%		%		%		%
	Depreciation		(27)		%		%		%		%
Deduct:	TOTAL OPERATING EXPENSES	(D)		$	%	$	%	$	%	$	%
Gives:	NET OPERATING INCOME (C)-(D) =	(E)		$	%	$	%	$	%	$	%
OTHER INC. & EXPENSE:	Tobacco & Candy Sales		(2)	$		$		$		$	
	Miscellaneous Sales		(3)								
	Add Net Cash Over-Deduct Net Under		(9)								
Less:	Cost of Candy & Tobacco Sold		(13)								
Less:	Miscellaneous Expenses		(23)								
Add:	NET OTHER INCOME	(F)		$	%	$	%	$	%	$	%
Gives:	NET INCOME (E) plus	(F)		$	%	$	%	$	%	$	%

* This figure should include manager's wages even if self-employed

Sources: 1-7 CASH RECEIPTS book
11-23 CURRENT PURCHASES AND EXPENSES book
(27) DEPRECIATION SCHEDULE
(30) INVENTORY RECORD