

## BUSINESS RESEARCH

## COST RESEARCH

(Tweede referaat)

## Harvard Bureau of Business Research

The Bureau of Business Research of Harvard University has continued consistently to adhere to the original purpose, for which it was established in 1911, of providing reliable first-hand information for assistance in teaching. Although business men have found the results of the Bureau's work of increasing value in dealing with their immediate problems of commercial life, there also has been a definite recognition by many business men of their professional responsibility to make the real facts regarding their business activities available in order that business education may be soundly based upon experience.

The activities which the Bureau has undertaken up to the present time have come to be clearly defined into two major fields. One of these is the study of operating expenses and the other the collection of cases for teaching purposes. Both fields have the same fundamental object of improving the quality of the training given to students in the School, and, in those fields in which cost research has been carried on, definite standards have been provided by means of which the various policies brought up in cases can be tested. In so far as it is possible for the Bureau to extend its cost studies into other fields, an increasingly reliable basis will be obtained for judging the validity of the precedents established by the cases collected; the two fields of research are closely related to each other.

The policy that was adopted in 1919 of continuing only such studies of operating expenses as were financed by the trades themselves has proved to be wise, and no new studies are being undertaken except strictly in accordance with that plan. Such arrangements are equitable in that the experience of the last 15 years has shown that the results of these studies are of fully as great immediate value to the trades themselves as they are to the School, and it is obviously fair that the trades which receive the benefit should bear the cost of the studies rather than that the Bureau should undertake to raise such funds from other sources. The annual number of reports and the volume of sales of the firms submitting reports are shown in the following table:

In each of its cost studies the Bureau has used a standard classification of accounts in order to make sure that all the figures were comparable. The initial experience in the summer of 1911 showed that hardly two firms in one trade used the same terms in the same sense. For each of the trades studied, with the exception of the department store business, the Bureau itself has prepared a standard system of accounts; for department stores it has used the classification prepared by the Controllers' Congress. The Bureau's accounting systems, each of which was prepared after a careful field investigation, are coming into more and more general use. In fact, one of the noteworthy results of the Bureau's activities during the last 15 years is the improvement in accounting methods among a large number of firms. Even many firms that have not adopted the

Year	Retail Shoe		Retail Grocery		Wholesale Grocery		General Store	
	No. of Firms	Total Sales	No. of Firms	Total Sales	No. of Firms	Total Sales	No. of Firms	Total Sales
1914	160*	\$ 9,608,000	253	\$ 12,025,000	—	—	—	—
1916	—	—	35	„ 1,924,000	108	\$ 130,094,000	—	—
1917	44	„ 1,686,000	35	„ 1,207,000	130	„ 187,605,000	21	\$ 2,119,000
1918	138	„ 14,111,000	135	„ 9,808,000	145	„ 218,195,000	75	„ 4,275,000
1919	197	„ 28,127,000	175	„ 16,334,000	159	„ 273,657,000	98	„ 9,289,000
1920	397	„ 76,489,000	—	—	322	„ 643,949,000	—	—
1921	407	„ 70,699,000	—	—	344	„ 487,951,000	—	—
1922	421	„ 51,000,000	443	„ 43,475,000	442	„ 556,021,000	—	—
1923	499	„ 68,364,000	471	„ 63,799,000	501	„ 677,709,000	—	—
1924	—	—	545	„ 88,038,000	—	—	—	—

Year	Retail Hardware		Retail Drug		Retail Jewelry		Department Stores	
	No. of Firms	Total Sales	No. of Firms	Total Sales	No. of Firms	Total Sales	No. of Firms	Total Sales
1918	218**	\$ 17,532,000	—	—	—	—	—	—
1919	155	„ 8,229,000	187	\$ 8,998,000	100	\$ 7,601,000	—	—
1920	—	—	—	—	182	„ 13,780,000	266	\$ 535,068,000
1921	—	—	—	—	190	„ 10,985,000	301	„ 496,238,000
1922	—	—	—	—	302	„ 25,700,000	522	„ 803,053,000
1923	—	—	—	—	371	„ 32,263,000	607	„ 1,022,893,000
1924	—	—	—	—	364	„ 34,502,000	613	„ 1,025,788,000

Year	Retail Tire and Accessory		Wholesale Auto-motive Equipment		Wholesale Drug		Wholesale Dry Goods (Southern)	
	No. of Firms	Total Sales	No. of Firms	Total Sales	No. of Firms	Total Sales	No. of Firms	Total Sales
1922	—	—	—	—	100	\$ 162,954,000	—	—
1923	211	\$ 16,904,000	128	\$ 76,447,000	117	„ 194,650,000	71	\$ 93,105,000
1924	—	—	151	„ 98,382,000	129	„ 204,298,000	—	—

\* Includes 1912—1915.

\*\* Includes 1917 and 1918.

complete classification are using some of its provisions. This improvement in accounting methods has facilitated the collection of more and more reliable data by the Bureau.

In standardizing the definitions of the accounts, the Bureau has not sought to prescribe the bookkeeping methods to be used; each classification can be used successfully with various bookkeeping systems, according to the preference of individual merchants. While simple systems of record sheets have been provided by the Bureau for several trades, they are recommended only to those merchants who are not prepared to keep more dependable double-entry books.

In the collection of the reports on operating expenses it was necessary for the Bureau to employ field agents during the first few years of its pioneer work. Since 1917, however, all its reports, except on new studies, have been secured by mail. Methods of circularizing and of checking the statements have been developed that warrant placing dependence upon the mail results which can be secured at much less expense and more promptly than by field agents. Only complete statements giving actual figures in dollars and cents for sales, for other merchandise accounts, and for expenses are used in the Bureau's tabulations. Percentage figures are not accepted because of the difficulty in checking their accuracy. The Bureau, of course, assures each cooperator that his figures will be held confidential, and the spirit of confidence that has been established by the Bureau's handling of these statements has aided greatly in the more recent developments of its case work.

In addition to the bulletin in which the results for each trade are summarized without revealing the identity of the individual firms, the Bureau supplies each cooperator with a statement of his own percentages worked out on the standard plan, in order that he may compare his results directly with the summaries for all firms reporting, for firms with a similar volume of sales, and for firms in the same geographic region. This checking of the individual statements and the return of the percentage figures to the individual merchant are the chief reasons that induce many merchants to submit their reports to the Bureau.

Up to June 1, 1926, the Bureau had published 56 bulletins. These included the bulletins on the classifications of accounts, the analyses of operating expenses (in recent years on an annual basis), a stock-keeping system for shoe retailers, and special reports on management problems in retail shoe and grocery stores and methods of paying salesmen in the wholesale grocery business. The series also included the Bureau's bulletin on "International Comparisons of Prices of Cotton Cloth" and its bulletin on "Labor Terminology". We also have issued "A Study of Cotton Hedging for a Grey Goods Mill, 1921—1923". This experimental study on the desirability of protective hedging includes construction of hedges based on actual records of cotton purchases and cloth orders of a Southern grey goods mill and future prices on the New York Cotton Exchange. In addition, the Bureau has published a booklet on the distribution of textiles throughout the United States in 1924, including figures for the cotton, silk, woolen and worsted, and rug and carpet industries and trades. The bulletins published by the Bureau have been furnished without charge to the cooperating firms in the respective trades from which individual reports were received. To others they have been sold at a nominal price, and the income has been applied to further research.

The Bureau's task in this work is to report the facts as shown by the statements received from merchants in each trade. Although by no means all the firms in any one trade report to the Bureau, enough statements are being received, we are

convinced, to furnish a truly representative sample of conditions. Many requests are received for opinions on points in store management. The Bureau has adhered to a policy of expressing opinions only on questions on which it has received first-hand information. It undertakes no auditing work, for example, and it does not attempt to give advice on such questions as income tax statements. Wherever actual facts are available that will aid an inquirer in the solution of a specific problem, the Bureau furnishes the facts just so far as possible without revealing information received confidentially from individual firms.

The Bureau is constantly in receipt of requests to make special field or plant investigations for individual firms, the results to be used privately by the firm. No such inquiries are undertaken on a commercial fee basis. It seems improper for the Bureau to conduct surveys which can be made equally well by established firms of accountants or private commercial research organizations. The Bureau has its special field in collecting data that could not be obtained by a private organization as advantageously as by the University, and that is the field to which it aims to confine its efforts. It also would be obviously improper for the Bureau to use the University's name in collecting confidential information for the private gain of a single firm. We conceive it to be our duty to make the results of our research available for instruction and eventually for use by business firms.

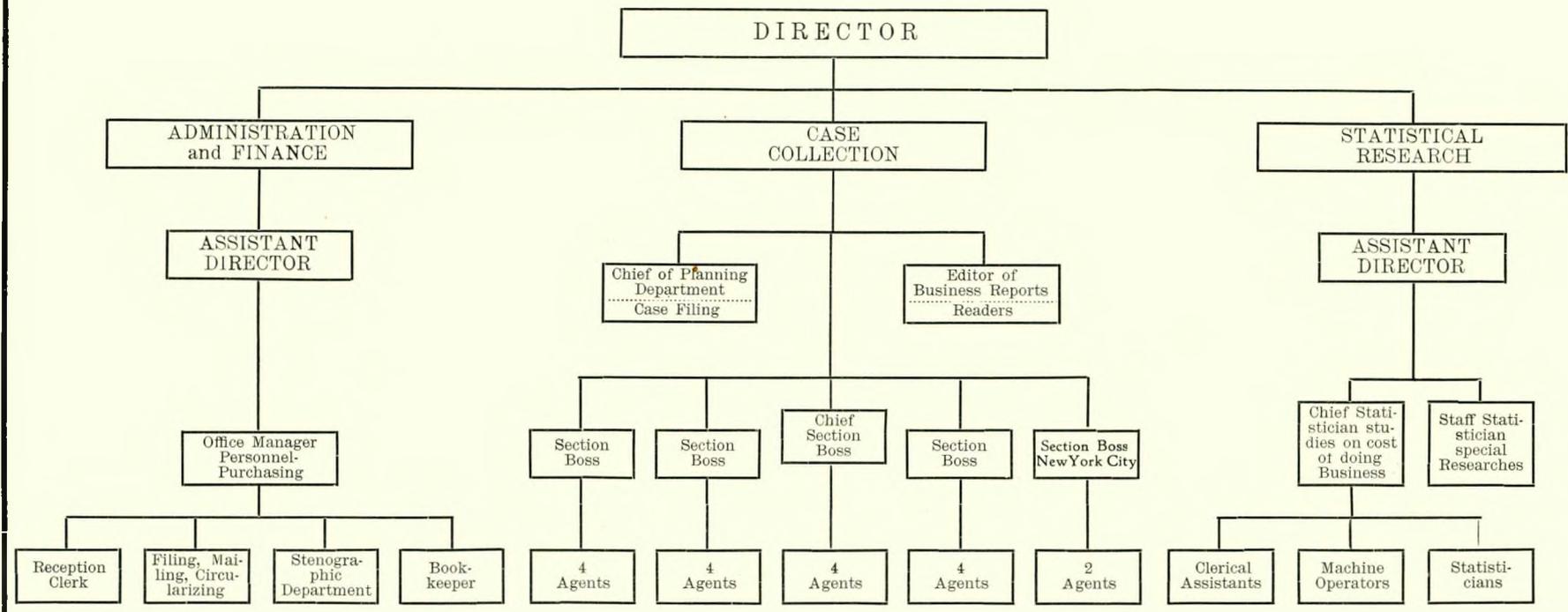
New studies of operating expenses in retail and wholesale trades will be undertaken from time to time as funds become available. We also are looking forward to the time when we can make similar studies, at least experimentally, in one or more manufacturing industries. Such a project has been in mind ever since the Bureau was established, and we believe that just as valuable results can be accomplished among manufacturing industries as have been achieved with retail and wholesale trades. Such investigations, furthermore, probably would be particularly fertile in the development of our collection of cases.

#### COLLECTION OF CASES

Notable progress has been made in the development of the plan for the collection of cases for teaching purposes. From December, 1920, to May 1, 1926, the Bureau has collected 5,238 problems and cases. A case, as defined in the practice of the Harvard Bureau of Business Research, consists of a statement of a problem which an individual company faced, of the circumstances which affected the situation, and of any peculiarities in the organization of the company which might be significant, thus giving the entire background of the problem; a detailed statement of the solutions considered by the company, and of the factors which decided what course of action should be adopted; and, whenever possible, the results over a period of time of the decision made. Some of the fields to which especial attention has been given are advertising, business policy, foreign trade, industrial accounting, industrial finance, industrial management, investment banking, labor, lumbering, marketing, public utilities, retail store management, sales management, statistics, and transportation.

The methods of procedure that so far have stood the test of experience may be summarized briefly as follows. Inasmuch as this work is undertaken directly to provide material for teaching, it has been found necessary to obtain from each instructor a comprehensive outline of the points which he wishes to have exemplified in the cases collected. The best results have been obtained, not from a general topical outline, but from a detailed list of the individual principles which it is desired

# BUREAU OF BUSINESS RESEARCH



GRADUATE SCHOOL OF BUSINESS ADMINISTRATION  
HARVARD UNIVERSITY

to have covered case by case. These outlines must be in a measure hypothetical, of course, depending in part upon the degree to which the fundamental theory of the individual subject has been formulated. It has been found highly advantageous, furthermore, for the members of the Bureau's staff to confer frequently with the instructors on whose programs they are at work, in order to receive constructive suggestions regarding the handling of individual cases. Particular attention is given by the instructors to the amount of detail to be included in the cases and to the precise form of presentation that promises to be most serviceable. Situations are being discovered continually which do not fit exactly in the outline prescribed, and the advice of the instructor is secured, if possible, as to whether the situations are worth presentation in case form.

At the present time every case which is written is intended to involve some principle in business management. There are various ways in which this principle may appear. In some cases there is a conflict between principles, and in numerous instances there are conflicts between principle and expediency. Cases which involve merely expediency or which are only descriptive have been found altogether unsatisfactory, and the Bureau aims not to compile any cases of that sort.

After the outline has been prepared with the assistance of the instructor, the specific cases suggested in the outline are assigned to the Bureau's agents, and so far as possible probable sources of obtaining the information are given them. The agents then arrange for interviews with the business firms to learn whether the particular cases can be secured there, and, if not, what other cases are available. During each interview the agent is expected to secure the essential basic information and background for the case, to crystallize the issue that is involved, and to learn the decision reached by the firm and the reasons for that decision. In instances in which decisions have not been reached, the material commonly is prepared in problem form.

A system has been developed in the Bureau of carefully checking these cases in order to make them as nearly complete as possible and thoroughly dependable. They are then turned over to the instructors for class use. The instructors are expected, of course, to question any statements in the cases that in view of their experience seem to be of doubtful reliability. It also is their province to give the cases a final editing for class use or for publication. In the publication of the problem books for class use, the Bureau takes no part whatsoever other than furnishing the problems to the instructors.

So far as possible, the cases written by agents of the Bureau are submitted to the business men from whom they have been collected in order to make sure that facts have been reported accurately and that there has been no violation of confidence. It is understood, of course, that the information obtained from each firm will be disguised, if desired, so as to avoid revealing the identity of its source. This does not invalidate the case and usually involves no serious obstacle.

The Bureau does not undertake to solve the problems that are presented to it by business firms. It frequently happens that the Bureau is requested to undertake the solution of some problem. Aside from other obvious reasons for not following such a policy, there is the insuperable one of expense; to try to solve the problems that have been offered to the Bureau on this basis would have required a staff at least two or three times as large as the one that was maintained. The Bureau's task is to report the problems as they actually have arisen and the cases as they have been decided by the business firms; it does not undertake to expound any theories as to what the decision should have been.

During 1925, as a further step in the research program, stu-

dies were made various problems which have arisen in the attempts of many firms to increase the rate of stock turnover, to decrease carrying charges, and to increase the margin of profit on merchandise. Twenty-one studies of merchandise policies and stock control methods which were chosen for publication have been published in Bulletin No. 55, Cases on Merchandise Control in the Wholesale Grocery Business. In so far as the same general principles of merchandising and stock control apply in other fields, the value of this bulletin is not restricted to the wholesale grocery trade.

Somewhat similar in purpose to Bulletin No. 55 are the Harvard Business Reports. These collections of cases, the first volume of which was published in the early fall of 1925, are intended to make accessible records of the experience and practice of various businesses as they have been prepared by the Bureau. The first volume of the series contains 149 cases selected from the hundreds available at the Bureau; each of these cases has particular importance as an example of current business practice or as a guide to sound business management. It is expected that additional volumes will be issued from time to time covering different phases of business and making records of actual business experience available to all those concerned in it.

G. F. DORIOT

---

#### DE STATISTIEK OP DE T. O. P. A.

---

Volgens het programma der van 19 Juni tot 19 Juli j.l. te Amsterdam gehouden tentoonstelling op het gebied der openbare en particuliere bedrijfsadministratie had deze ten doel „inzicht te geven in de ontwikkeling der moderne systemen van administratie en „administratieve statistiek". Het is dus niet te verwonderen, dat wij met groote belangstelling en nieuwsgierigheid de tentoonstelling gingen bezoeken om ons op de hoogte te stellen van de moderne systemen der bedrijfsstatistiek, die er te zien zouden zijn.

Laten wij maar direct zeggen, dat wij in onze verwachtingen zeer zijn teleurgesteld, want dat wij er eigenlijke bedrijfsstatistiek, zoals wij die meenen te mogen opvatten, nagenoeg niet hebben kunnen vinden. Komt dit, doordat het bedrijfsbeheer, het openbare zoowel als het particuliere, nog niet zoover is ontwikkeld, dat het ook de statistiek als hulpmiddel heeft aanvaard, of doordat de exposanten het niet de moeite waard hebben gevonden ook hun statistiek te laten zien? Wij spreken hierover geen oordeel uit, doch merken alleen op, dat in het laatste geval dit deel der tentoonstelling als mislukt is te beschouwen, terwijl zij in het eerste geval het nut heeft gehad, dat de aandacht op dit te weinig beploegde en nog voor ontginning openliggende veld is gevestigd.

Hoe dit zij, wij meenen, dat het nuttig kan zijn hier enkele opmerkingen te maken over de statistiek, die er dan wel was. Wellicht kan hiermede bij volgende tentoonstellingen rekening worden gehouden.

Wij moeten dus beginnen aan te geven, wat wij onder bedrijfsstatistiek verstaan.

Deze heeft, naar onze meening, slechts beteekenis, voor zoover zij verschijnselen in het bedrijf doet kennen, die op andere wijze dan door toepassing der statistische methode niet kunnen worden waargenomen, die men dus alleen langs statistischen weg kan vinden. De toepassing is slechts mogelijk, als het bedrijf over een speciale vakkundige statistische afdeling als onderdeel der