CHAPTER 3

THE CLASSIFICATION AND CHARACTERISTICS OF SERVICE INDUSTRIES

There exists no authoritative consensus on either the boundaries or the classification of the service industries. The boundaries are not particularly important: it matters little whether government or trade is called a service industry, or, because of its size, is given an independent status, so long as it receives its proper attention.

The classification of service industries, however, is more urgent. It would be desirable to distinguish more or less homogeneous groups of industries to assist us in the study of a wide class of industries which, taken together, display great heterogeneity with respect to every significant economic characteristic. We shall therefore begin this survey of the growth of employment in various service industries with a brief statement of the (arbitrary) list of industries we include, and then a somewhat fuller analysis of classifications and characteristics.

1. The Scope of the Service Industries

The phrase "service industry" connotes economic activity which takes the salable form primarily or exclusively of a personal service rather than a material commodity—the industries which provide material commodities being designated as agriculture, manufacturing, construction, and the like. The borderlines of even this simple division are perplexing: it is not evident that a firm assembling purchased parts creates material commodities in a manner different from a restaurant preparing and serving food, although the Census calls the former establishment manufacturing and the latter trade.

As we have said, the division between the broad categories is more difficult than significant, and without further ado we list (in Table 16) the industries which we shall term the service industries. The list is commonplace in that we include none of the industries conventionally assigned to the commodity-producing categories. It is nonliteral at least to the extent that we omit transportation and other public utilities providing nonmaterial products, simply because they have been treated in earlier National Bureau studies.¹

¹ But the characteristics of transportation and public utilities are suf-
CLASSIFICATION AND CHARACTERISTICS

TABLE 16
Service Industries and Their 1950 Employment

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail trade</td>
<td>8,544</td>
</tr>
<tr>
<td>Government</td>
<td>6,503</td>
</tr>
<tr>
<td>Education</td>
<td>1,539</td>
</tr>
<tr>
<td>Armed forces</td>
<td>997</td>
</tr>
<tr>
<td>Medical and health</td>
<td>446</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>1,976</td>
</tr>
<tr>
<td>Domestic service</td>
<td>1,632</td>
</tr>
<tr>
<td>Insurance and real estate</td>
<td>1,268</td>
</tr>
<tr>
<td>Medical and health (private)</td>
<td>1,183</td>
</tr>
<tr>
<td>Laundries, cleaning, etc.</td>
<td>675</td>
</tr>
<tr>
<td>Automobile repairs</td>
<td>660</td>
</tr>
<tr>
<td>Other personal services(\text{a})</td>
<td>321</td>
</tr>
<tr>
<td>Banking and finance</td>
<td>590</td>
</tr>
<tr>
<td>Welfare, religious and membership orgs.</td>
<td>557</td>
</tr>
<tr>
<td>Entertainment and recreation services</td>
<td>541</td>
</tr>
<tr>
<td>Education (private)</td>
<td>531</td>
</tr>
<tr>
<td>Hotels and lodging places</td>
<td>519</td>
</tr>
<tr>
<td>Business services</td>
<td>453</td>
</tr>
<tr>
<td>Legal, engineering and misc. prof. services</td>
<td>379</td>
</tr>
<tr>
<td>Barbers and beauty shops(\text{b})</td>
<td>331</td>
</tr>
<tr>
<td>Miscellaneous repair services</td>
<td>286</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27,283</strong></td>
</tr>
</tbody>
</table>

\(\text{a}\) Excluding the number employed in barber and beauty shops as reported in the 1948 Census.

\(\text{b}\) Census of Business, 1948, Bureau of the Census, Vol. VI, Table 1G.


These various service industries together employed about 27.3 million persons in 1950—some 47 per cent of the employed labor force—or, if we exclude government from both totals, some 20.4 million out of a total of 50.7 million privately employed individuals. The industries are overwhelmingly those which deal with consumers rather than with business enterprises. If we again put aside government—although on any reasonable view it provides chiefly sufficiently peculiar so that in any event they deserve separate analysis. The studies are J. M. Gould, Output and Productivity in the Electric and Gas Utilities, 1899-1942, 1946, and Harold Barger, The Transportation Industries 1889-1946, 1951, both National Bureau of Economic Research.
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customer services—there are only five large business service categories in our list: wholesale trade, a part of legal and engineering services, banking and finance, miscellaneous business services, and a part of real estate.

2. The Classification of Service Industries

In manufacturing, where the analysis of industry categories has a long statistical history, groups of industries have been classified sometimes by their chief raw material (as rubber products and nonferrous metals), sometimes by their final products (automobiles, machinery). Both types of classification are fundamentally related to technology—and it is paradoxical that in the sector of the economy where technology is popularly conceived to be most rapidly changing, a fairly stable technological classification of industries is possible.

In the service industries a classification by general type of input would be uninformative—industries as diverse as legal practice and domestic service share the characteristic of requiring chiefly personal services. Since the service industries do not in general create material commodities, the type of goods produced would also be an uninformative basis for classification, and a type of service classification would lead us back to the occupational structure. So we turn to other characteristics.

TYPE OF BUYER

A first basis, already partly incorporated in the Census of Service Establishments, is the division of industries between those serving chiefly business and those chiefly ultimate consumers. Most service industries deal chiefly with consumers, as we have noted, but sizable groups do not. We can make rough estimates of the portion of sales to business enterprises in the industries where this is of importance.

At one extreme stands wholesale trade, 99 per cent of whose receipts come from business enterprises,\(^2\) and the various business services such as advertising, engineering, accounting, and similar independent professional groups.\(^3\) Legal service is closer to the dividing line: in 1947 about 25 per cent of the lawyers were salaried employees of business and government, and the independent


\(^3\) But the business services include also industries which serve ultimate consumers, e.g. window cleaning, disinfectant and exterminating services.
lawyers received 47.9 per cent of their fees from businesses.\textsuperscript{4} Probably well over half the employees in "real estate" deal with private residential property.\textsuperscript{5} Well over half of the employees in insurance are in those branches dealing with private individuals.\textsuperscript{6} Aside from finance and banking, for which no estimate can be made, other large service industries deal primarily with private consumers.

There are two reasons why the industries serving chiefly business enterprises should be separately dealt with. The first reason is that invariably a considerable, and sometimes dominant, portion of the activity is carried on within nonservice business enterprises themselves. For example, the census reports a small industry engaged in duplicating, addressing, and mailing—of course the vast majority of this work is done by the business firms within their own establishments. Even a large and increasing share of wholesaling is being undertaken by manufacturers. It would be seriously misleading to measure trends in employment or output in this type of activity on the basis of the employment or output in the separately organized businesses performing a changing share of the work. The second reason for separate treatment is that to explain trends in business service industries one must usually turn to a wholly different set of explanatory factors from those found working in consumer service industries.

We shall therefore put to one side the predominantly business service industries, and discuss their growth in a separate chapter (7).

CATEGORIES OF CONSUMER EXPENDITURE

Since most service industries deal with consumers, it is natural to seek for a classification of these industries on the basis of the categories of expenditure which have been developed to analyze consumer behavior. This classification has a basic significance: The most active competition will usually be between those indus-

\textsuperscript{4} Survey of Current Business, Dept. of Commerce, August 1949, p. 18.
\textsuperscript{5} Office buildings, the largest commercial class in real estate, employed 87,000 people in 1935. Census of Business, 1935, Non-profit Organizations, Office Buildings, Miscellaneous, Table 7, p. 22.
\textsuperscript{6} In 1939, 66 per cent of premium income was from life insurance, and 16 per cent from fire and marine insurance, and 18 per cent from casualty insurance. Private individuals are dominant in the first class, and important (through fire and automobile insurance) in the latter two. Life Insurance Fact Book, Institute of Life Insurance, 1953; Spectator Casualty and Surety Insurance Year Book, 1940; and Spectator Fire and Marine Insurance Year Book, 1940.
tries catering to the same class of consumer wants, so they will form a set of industries that can profitably be analyzed together. Moreover, any independent knowledge of consumer spending habits can be brought fairly directly to bear on the development of these related industries.

A classification of service industries by consumer service expenditure categories is already half recognized in the current statistics, but it is difficult to carry out in full detail. One need only mention the obvious example of department stores and the slightly less obvious examples of hotels (which derive about equal revenue from lodging and from meals and beverages) and domestic servants, whose services should be allocated among food, housing, etc.

Nor are the proper classes of consumer expenditures especially self-evident. The common budget category of household operation consists partly of laundry and soap expenditures, both perhaps better a part of clothing expenditures (which already include cleaning and pressing), telephone, which was unknown when Engel and his colleagues devised budget categories, and the versatile domestic servants. Children’s toys are listed under “recreation” and adult’s toys in the guise of hardware are put under “furnishings and equipment.” Still, these classes of expenditure are fairly well established, and the problems are no greater than one should expect when trying to summarize the purchases of 160 million people, some of whom are eccentric.

We give a rough classification of the service industries by expenditure categories in Table 17. Industries are put in the category in which their major activity falls—thus food stores are placed under food although they received some of their revenue from other commodities such as gasoline and tires. In the cases of general merchandise stores and hotels, however, a distribution of employees was made in proportion to sales receipts. The housing category is especially rough; it includes all real estate (and hence the servicing of much commercial space) and building materials that might better be put with the construction industries.

Rough as the figures are, and important as it is to remember that we have excluded the individuals who produce the commodities that some of these industries service, the listing of workers by expenditure category is very striking. Domestic service, which was probably in first place fifty years ago, had fallen to sixth place by 1950. Education has long been unusually important in America,
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#### TABLE 17

Employment in Service Industries by Categories of Consumer Expenditure, 1950

<table>
<thead>
<tr>
<th>Employment</th>
<th>Number (thousands)</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>4,460</td>
<td>25.8</td>
</tr>
<tr>
<td>Clothing</td>
<td>2,085</td>
<td>12.0</td>
</tr>
<tr>
<td>Education</td>
<td>2,070</td>
<td>12.0</td>
</tr>
<tr>
<td>Medical care</td>
<td>1,762</td>
<td>10.2</td>
</tr>
<tr>
<td>Automobile</td>
<td>1,713</td>
<td>9.9</td>
</tr>
<tr>
<td>Household operation (domestic servants)</td>
<td>1,632</td>
<td>9.4</td>
</tr>
<tr>
<td>Housing</td>
<td>1,164</td>
<td>6.7</td>
</tr>
<tr>
<td>Household furnishing</td>
<td>934</td>
<td>5.4</td>
</tr>
<tr>
<td>Entertainment and recreation</td>
<td>553</td>
<td>3.2</td>
</tr>
<tr>
<td>Community welfare and religious orgs.</td>
<td>400</td>
<td>2.3</td>
</tr>
<tr>
<td>Personal care</td>
<td>372</td>
<td>2.2</td>
</tr>
<tr>
<td>Fuel, light, and refrigeration</td>
<td>159</td>
<td>.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17,304</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Unallocated

| Trade | 2,038 |
| Insurance | 760 |
| Miscellaneous personal services | 537 |
| Nonprofit membership orgs. | 185 |
| Government | 2,489 |
| **Unallocated** | **6,009** |

Note: Expenditure categories were based on the classification in *Family Spending and Saving in Wartime*, Bureau of Labor Statistics, Bull. 822, 1945.

Employment in industries in 1950 whose major activity was obviously related to one expenditure category, such as food stores, offered no difficulty. Where employment was distributed over a variety of expenditure categories, as in general merchandise and variety stores, and hotels, employees in these industries were distributed in proportion to sales receipts reported in 1948 Censuses of Business and Manufactures.

Household operations and clothing categories differ in some details from the corresponding budget categories. Household operations consist entirely of domestic servants while the laundry component has been included with cleaning and dyeing under clothing.


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but “medical care” (which includes social work) has risen rapidly and now exceeds personal care and recreation together—as our stern ancestors would have wished it to.

PRIVATE VS. PUBLIC ACTIVITIES

Still another basis of classification is the public or private organization of the industry, which cuts across both the preceding classifications. To the extent that private and public industries compete, as in higher education, hospitals, etc., it seems desirable that they be considered together, although preferably with full detail on their comparative roles. Such competition is substantial in only two large service industries: education, where three-quarters of the employees were public in 1950, and medical and health industries, where one-quarter were public.\(^7\) Although we do not enter into the large subject of government economic activity, we shall discuss one purely governmental profession, the military officers, in Chapter 6.

3. Characteristics of the Service Industries

Even the enumeration of the broad categories of service industries is sufficient to indicate their variety of activities and economic characteristics. We shall now examine these industries in somewhat more detail to ascertain the areas and extents of their similarities and differences, and to provide a more useful basis for discussing employment trends in later chapters.

TYPE OF BUSINESS ORGANIZATION

The most comprehensive and detailed information on the types of business organization in various industries is contained in the federal income tax returns. The data have certain defects for our purposes, especially the incomplete coverage of individuals and partnerships.\(^8\) Yet the obligation to make tax returns is now so nearly universal that we have confidence in at least the broader findings.

In 1945, corporate enterprises constituted about one-sixteenth of all private business enterprises, and received about two-thirds of all business receipts (see Table 18). It follows that the average re-

\(^7\) See Table 6.
\(^8\) In particular, when sole proprietors did not report receipts, their net profits were substituted in the tabulations. Yet according to these data, noncorporate enterprise was generally more important than the 1939 industry censuses show.
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### TABLE 18

Types of Business Organization and Their Shares of Receipts, 1945

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>Percentages of Businesses</th>
<th>Percentages of Receipts</th>
<th>Average Receipts (Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sole Prop.</td>
<td>Partnerships</td>
<td>Corporations</td>
</tr>
<tr>
<td>Agriculture</td>
<td>96.2</td>
<td>3.6</td>
<td>.2</td>
</tr>
<tr>
<td>Construction</td>
<td>85.9</td>
<td>9.6</td>
<td>4.5</td>
</tr>
<tr>
<td>Mining</td>
<td>41.8</td>
<td>35.2</td>
<td>23.0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>46.4</td>
<td>23.4</td>
<td>30.2</td>
</tr>
<tr>
<td>Transportation</td>
<td>83.8</td>
<td>6.2</td>
<td>10.0</td>
</tr>
<tr>
<td>Trade</td>
<td>77.7</td>
<td>15.0</td>
<td>7.3</td>
</tr>
<tr>
<td>Service</td>
<td>88.2</td>
<td>8.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Finance</td>
<td>37.6</td>
<td>20.1</td>
<td>42.3</td>
</tr>
<tr>
<td>All</td>
<td>84.4</td>
<td>9.3</td>
<td>6.3</td>
</tr>
</tbody>
</table>


Receipts of a corporation were about thirty times those of a noncorporate enterprise. Corporations constitute a fifth or more of all enterprises in mining, manufacturing, and finance, and a tenth or more in transportation. Thus only one set of service industries (finance, real estate, and insurance) is composed to any appreciable extent of corporations; and in only two commodity-producing industries (construction and agriculture) are corporations relatively unimportant.

In terms of activity, measured by gross receipts, corporate enterprises were of course much more important: they wholly dominate manufacturing, mining, transportation, and finance, have almost half the receipts in trade and more than a third in service and construction. Corporations are conspicuously unimportant only in agriculture and the professions. Among the broad service categories, then, the only large distinctions to be found are in finance, real estate, and insurance (where the corporation is dominant), and in certain professional and personal services (including domestic...(If a and b are two classes of organizations, forming $n_a$ and $n_b$ percentages of all businesses and receiving $r_a$ and $r_b$ percentages of all receipts, then

$$\frac{\text{Average receipts of } a}{\text{Average receipts of } b} = \frac{r_a}{n_a} \div \frac{r_b}{n_b}$$

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tic service, which is not separately reported) where corporate ac-
tivity is negligible.

A corresponding analysis can be made of more narrowly de-

defined service industries (see Table 19). We find that the corporate

form is dominant (measured by receipts) in only a few large serv-
ice industries: wholesale trade, department and apparel stores,
hotels, business services, motion pictures, insurance agents, finance,
and real estate. On the other hand we encounter also among the
services almost all of the industries in which corporate enterprise
is of minor importance: many varieties of retail shops, various
personal services, automobile repairs, and the professions. Aside
from domestic service and agriculture, these are the only areas in
which the corporate form is still unimportant.

The correspondence between average receipts per business and
the share of business done by corporations is close, as we would
expect from the very fact that the small incomes are much more
heavily taxed when they pass through a corporation than when re-
ceived from a sole proprietor or partnership enterprise. A corporate
enterprise with a taxable income of $10,000 in 1945, for example,
paid corporate taxes of $2,100, and the remainder (if distributed
as dividends) in excess of personal exemptions and deductions was
taxed at a beginning rate of at least 20 per cent; an individual with
an income of $10,000 paid a federal tax of only $1,810 if he had
exemptions and deductions amounting to $2,500. Small enter-
prises are also deterred from incorporating by the legal costs of
this step.

LABOR CHARACTERISTICS

Since the average establishment in most service industries is
small, as measured by receipts, the employment per establishment
is also small (see Table 20). There are only five industries of those
for which we have data (namely, wholesale trade, department
stores, advertising, motion pictures, and laundries) with more than
ten persons per establishment (that is, store, shop, or separate lo-
cation of business activity). The average establishment in manu-
facturing or mining has more than ten times as many employees as
those in private service industries.

When there are less than ten persons in each establishment, and
these establishments are usually separate, unincorporated busi-
nesses, it follows that entrepreneurs are likely to be a large frac-
### TABLE 19
Types of Business Organization and Their Share of Receipts in Service Industries, 1945

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage of Businesses</th>
<th>Percentage of Receipts</th>
<th>Average Receipts (Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sole Prop.</td>
<td>Partnerships</td>
<td>Corporations</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>66.5</td>
<td>17.1</td>
<td>16.4</td>
</tr>
<tr>
<td>Retail trade</td>
<td>80.1</td>
<td>14.7</td>
<td>5.2</td>
</tr>
<tr>
<td>Department</td>
<td>74.1</td>
<td>18.7</td>
<td>7.2</td>
</tr>
<tr>
<td>Food</td>
<td>86.8</td>
<td>11.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Liquor</td>
<td>76.6</td>
<td>15.4</td>
<td>8.0</td>
</tr>
<tr>
<td>Drug</td>
<td>76.3</td>
<td>15.5</td>
<td>8.2</td>
</tr>
<tr>
<td>Apparel</td>
<td>72.7</td>
<td>15.7</td>
<td>11.6</td>
</tr>
<tr>
<td>Furniture</td>
<td>66.3</td>
<td>21.7</td>
<td>12.0</td>
</tr>
<tr>
<td>Eating places</td>
<td>79.5</td>
<td>16.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Motor vehicle</td>
<td>60.5</td>
<td>24.1</td>
<td>15.4</td>
</tr>
<tr>
<td>Filling stations</td>
<td>87.2</td>
<td>11.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Hardware</td>
<td>66.5</td>
<td>26.5</td>
<td>7.0</td>
</tr>
<tr>
<td>Lumber</td>
<td>74.5</td>
<td>12.9</td>
<td>12.6</td>
</tr>
<tr>
<td>Personal service</td>
<td>87.9</td>
<td>8.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Hotels</td>
<td>86.6</td>
<td>8.3</td>
<td>5.1</td>
</tr>
<tr>
<td>Laundries</td>
<td>72.7</td>
<td>18.5</td>
<td>8.8</td>
</tr>
<tr>
<td>Barber and beauty</td>
<td>93.2</td>
<td>6.8</td>
<td>a</td>
</tr>
<tr>
<td>Funeral service</td>
<td>78.3</td>
<td>21.7</td>
<td>a</td>
</tr>
<tr>
<td>Business service</td>
<td>79.9</td>
<td>8.6</td>
<td>11.5</td>
</tr>
<tr>
<td>Advertising</td>
<td>75.8</td>
<td>11.1</td>
<td>13.1</td>
</tr>
<tr>
<td>Auto repair</td>
<td>84.0</td>
<td>12.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Amusements</td>
<td>70.1</td>
<td>17.4</td>
<td>12.5</td>
</tr>
<tr>
<td>Motion pictures</td>
<td>a</td>
<td>36.1</td>
<td>63.9</td>
</tr>
<tr>
<td>Professional Services</td>
<td>94.3</td>
<td>5.7</td>
<td>a</td>
</tr>
<tr>
<td>Accountants</td>
<td>89.5</td>
<td>10.5</td>
<td>a</td>
</tr>
<tr>
<td>Physicians</td>
<td>97.6</td>
<td>2.4</td>
<td>a</td>
</tr>
<tr>
<td>Dentists</td>
<td>98.9</td>
<td>1.1</td>
<td>a</td>
</tr>
<tr>
<td>Legal</td>
<td>88.9</td>
<td>11.1</td>
<td>a</td>
</tr>
<tr>
<td>Engineering</td>
<td>88.1</td>
<td>11.9</td>
<td>a</td>
</tr>
<tr>
<td>Insurance agents</td>
<td>79.9</td>
<td>8.2</td>
<td>11.9</td>
</tr>
<tr>
<td>Finance</td>
<td>14.4</td>
<td>15.3</td>
<td>70.3</td>
</tr>
<tr>
<td>Real Estate</td>
<td>24.9</td>
<td>25.6</td>
<td>49.5</td>
</tr>
</tbody>
</table>

* a Not reported separately.

Source: Same as in Table 18.
### TABLE 20
Average Number of Workers per Establishment and Percentage of Proprietors in the Labor Force, Various Industries, Selected Years

<table>
<thead>
<tr>
<th>Industry</th>
<th>Year</th>
<th>Average Number of Workers plus Proprietors per Establishment</th>
<th>Proprietors as Percentage of Total Work Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade</td>
<td>1948</td>
<td>5.7</td>
<td>16.6</td>
</tr>
<tr>
<td>Wholesale</td>
<td></td>
<td>10.7</td>
<td>6.2</td>
</tr>
<tr>
<td>Retail</td>
<td></td>
<td>5.0</td>
<td>19.7</td>
</tr>
<tr>
<td>Food</td>
<td></td>
<td>3.1</td>
<td>32.3</td>
</tr>
<tr>
<td>Eating and drinking</td>
<td></td>
<td>5.0</td>
<td>21.7</td>
</tr>
<tr>
<td>General</td>
<td></td>
<td>20.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Apparel</td>
<td></td>
<td>6.1</td>
<td>14.0</td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
<td>5.4</td>
<td>17.3</td>
</tr>
<tr>
<td>Automotive</td>
<td></td>
<td>8.3</td>
<td>10.9</td>
</tr>
<tr>
<td>Filling station</td>
<td></td>
<td>2.6</td>
<td>40.6</td>
</tr>
<tr>
<td>Hardware</td>
<td></td>
<td>4.6</td>
<td>22.6</td>
</tr>
<tr>
<td>Lumber</td>
<td></td>
<td>7.4</td>
<td>12.3</td>
</tr>
<tr>
<td>Drug</td>
<td></td>
<td>6.2</td>
<td>15.0</td>
</tr>
<tr>
<td>Liquor</td>
<td></td>
<td>2.5</td>
<td>34.9</td>
</tr>
<tr>
<td>Services</td>
<td>1948</td>
<td>4.1</td>
<td>24.1</td>
</tr>
<tr>
<td>Hotels, tourist camps</td>
<td></td>
<td>8.1</td>
<td>11.7</td>
</tr>
<tr>
<td>Personal</td>
<td></td>
<td>3.4</td>
<td>29.8</td>
</tr>
<tr>
<td>Laundry, cleaning</td>
<td></td>
<td>13.1</td>
<td>8.0</td>
</tr>
<tr>
<td>Barber and beauty shops</td>
<td></td>
<td>2.0</td>
<td>52.6</td>
</tr>
<tr>
<td>Funeral service</td>
<td></td>
<td>3.2</td>
<td>31.6</td>
</tr>
<tr>
<td>Business services</td>
<td></td>
<td>8.5</td>
<td>10.3</td>
</tr>
<tr>
<td>Advertising</td>
<td></td>
<td>12.9</td>
<td>5.7</td>
</tr>
<tr>
<td>Automobile repairs</td>
<td></td>
<td>2.7</td>
<td>39.9</td>
</tr>
<tr>
<td>Amusements</td>
<td></td>
<td>7.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Motion pictures</td>
<td></td>
<td>10.5</td>
<td>4.3</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1945</td>
<td>1.6</td>
<td>59.4</td>
</tr>
<tr>
<td>Mining</td>
<td>1939</td>
<td>54.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1947</td>
<td>60.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Construction</td>
<td>1939</td>
<td>6.0</td>
<td>17.4</td>
</tr>
</tbody>
</table>

Source: Census of Business, 1948, Bureau of the Census, Vol. II, Table 1A; Vol. IV, Table 1A; and Vol. VII, Table 1A. Census of Business, 1939, Vol. IV, Table 1A. Census of Agriculture, 1945, Vol. II, Chap. 5, Table 2. Census of Manufacturers, 1947, Vol. I, Chap. 2, Table 1.

...tion of the labor force, and so they are in most of the service industries. They form a fifth of all workers in retail trade, almost one-third in personal service, two-fifths in auto repairing, and probably as much in professional services. Only in wholesale trade, hotels, laundries, advertising, and amusements are entrepreneurs a small...
part of the labor force—and all are industries in which the corporate form is relatively important.

The large ratio of self-employed entrepreneurs to the total labor force, together with the small size of the individual businesses, has been a major explanation of the relatively small role of unionization in the service industries. In 1946 the extent of unionization was estimated to be as follows:

<table>
<thead>
<tr>
<th>Percentage of Workers under Union Agreements</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 to 100</td>
<td>Actors and musicians</td>
</tr>
<tr>
<td>60 to 80</td>
<td>Theatre crafts</td>
</tr>
<tr>
<td>20 to 40</td>
<td>Barber shops</td>
</tr>
<tr>
<td>20 to 40</td>
<td>Building service and maintenance</td>
</tr>
<tr>
<td>20 to 40</td>
<td>Cleaning and dyeing</td>
</tr>
<tr>
<td>20 to 40</td>
<td>Hotels and restaurants</td>
</tr>
<tr>
<td>20 to 40</td>
<td>Laundries</td>
</tr>
<tr>
<td>0 to 20</td>
<td>All other</td>
</tr>
</tbody>
</table>

Only two industries had crossed the boundaries of these twenty-per-cent brackets since 1938.¹⁰

Finally, we may give the educational training and sex composition of the labor force in the service industries (Table 21). The professions naturally stand at the top of the list of industries in terms of formal educational training—this is a basic element of their definition—but even trade, business services, amusements, real estate, and insurance have higher percentages of college-trained people than the nonservice industries. Moreover, every broad service industry employs a relatively larger share of women than the nonservice industries.

The formal education of the labor force has been rising continuously for a century, and the fraction of women in the labor force has also been rising markedly. These developments are probably related as both cause and effect with the rise of the service industries. The growth of some industries, such as the professions, was contingent upon the increasing number of highly educated people. The growth of other industries, such as retailing, was an important source of the demand for the increasing number and share of women in the labor force. Domestic service was staffed to an unusual

**CLASSIFICATION AND CHARACTERISTICS**

**TABLE 21**

Educational Training and Sex of Labor Force in Selected Industries, 1940

<table>
<thead>
<tr>
<th>Industry</th>
<th>Less than Some High School Education</th>
<th>Some High School Education</th>
<th>Some College Education</th>
<th>PERCENTAGE OF WORKERS Male</th>
<th>PERCENTAGE OF WORKERS Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale</td>
<td>35.4</td>
<td>46.8</td>
<td>17.8</td>
<td>84.9</td>
<td>15.1</td>
</tr>
<tr>
<td>Retail</td>
<td>39.6</td>
<td>48.6</td>
<td>11.8</td>
<td>70.8</td>
<td>29.2</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>43.2</td>
<td>45.4</td>
<td>13.4</td>
<td>83.5</td>
<td>16.5</td>
</tr>
<tr>
<td>Domestic</td>
<td>67.5</td>
<td>29.9</td>
<td>2.6</td>
<td>11.5</td>
<td>88.5</td>
</tr>
<tr>
<td>Hotels and lodging</td>
<td>52.1</td>
<td>38.8</td>
<td>9.1</td>
<td>48.3</td>
<td>51.7</td>
</tr>
<tr>
<td>Launderies, cleaning</td>
<td>54.7</td>
<td>38.8</td>
<td>6.5</td>
<td>51.0</td>
<td>49.0</td>
</tr>
<tr>
<td>Miscellaneous personal</td>
<td>54.8</td>
<td>38.6</td>
<td>6.6</td>
<td>54.4</td>
<td>45.6</td>
</tr>
<tr>
<td>Automobile repairs</td>
<td>51.4</td>
<td>41.8</td>
<td>6.8</td>
<td>97.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Amusements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theatre and motion picture</td>
<td>51.3</td>
<td>40.0</td>
<td>8.7</td>
<td>73.3</td>
<td>26.7</td>
</tr>
<tr>
<td>Miscellaneous amusements</td>
<td>41.1</td>
<td>45.4</td>
<td>15.5</td>
<td>84.8</td>
<td>15.2</td>
</tr>
<tr>
<td>Professional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>12.6</td>
<td>18.2</td>
<td>69.2</td>
<td>34.8</td>
<td>65.2</td>
</tr>
<tr>
<td>Medical</td>
<td>18.7</td>
<td>43.1</td>
<td>38.2</td>
<td>41.8</td>
<td>58.2</td>
</tr>
<tr>
<td>Legal, engineering</td>
<td>7.4</td>
<td>33.1</td>
<td>59.5</td>
<td>72.5</td>
<td>27.5</td>
</tr>
<tr>
<td>Charitable, religious</td>
<td>25.8</td>
<td>31.3</td>
<td>42.9</td>
<td>64.9</td>
<td>35.1</td>
</tr>
<tr>
<td>Real estate</td>
<td>43.4</td>
<td>39.7</td>
<td>16.9</td>
<td>73.9</td>
<td>26.1</td>
</tr>
<tr>
<td>Finance and banking</td>
<td>19.4</td>
<td>54.3</td>
<td>26.3</td>
<td>69.6</td>
<td>30.4</td>
</tr>
<tr>
<td>Insurance</td>
<td>16.8</td>
<td>54.1</td>
<td>29.1</td>
<td>64.5</td>
<td>35.5</td>
</tr>
<tr>
<td>Government, n.e.c.</td>
<td>31.7</td>
<td>47.6</td>
<td>20.7</td>
<td>94.2</td>
<td>5.8</td>
</tr>
<tr>
<td>Agriculture</td>
<td>77.9</td>
<td>19.3</td>
<td>2.8</td>
<td>98.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Mining</td>
<td>67.4</td>
<td>26.8</td>
<td>5.8</td>
<td>89.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Construction</td>
<td>60.9</td>
<td>32.3</td>
<td>6.8</td>
<td>78.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>52.3</td>
<td>39.6</td>
<td>8.1</td>
<td>96.9</td>
<td>3.1</td>
</tr>
<tr>
<td>Railroads</td>
<td></td>
<td></td>
<td></td>
<td>46.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Utilities</td>
<td>46.9</td>
<td>42.3</td>
<td>10.8 84.5</td>
<td>53.5</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric light &amp; power</td>
<td>87.1</td>
<td></td>
<td></td>
<td>12.9</td>
<td></td>
</tr>
</tbody>
</table>

n.e.c. = not elsewhere classified.


extent by immigrants, on the other hand, and the declining flow of immigration since World War I has contributed to the unusually slow rate of growth (and since 1940, absolute decline) in the number of servants.

**CONCLUSION**

The general picture of the service industries is one of small business units, organized as single proprietorships or partnerships, em-
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ploying only a small number of workers in each establishment. Yet several important groups of industries depart systematically from this pattern: wholesale trade, a few selected lines of retail trade, hotels, business services, motion pictures, insurance agents, finance, and real estate.\textsuperscript{11} The list contains all the important service industries dealing with businesses (except legal and engineering services) and confirms our decision to treat them separately from the consumer service industries.

The variety of characteristics displayed by the different service industries compels us to look more closely at individual industries rather than attempt an over-all study. And the number of service industries is such that we cannot both sample widely and penetrate deeply. These limitations will be evident in later chapters, but we emphasize here how they arise out of the nature of our vast subject.

\textsuperscript{11} Each of these industries is relatively more localized geographically than the class of remaining service industries, excluding domestic service (which however is somewhat concentrated in the South). \textit{Industrial Location and National Resources}, National Resources Planning Board, December 1942.