doctors can think more of their bank balances than of their patients. The salesman who must go through life with an artificial smile on his face while caring little for his customers and less for what he sells is often held in low regard. But at their best many service occupations are extremely rewarding and the line between “work” and “leisure” activity is often difficult to draw.

Some service occupations, notably those involving personal service, are not well regarded in this country. A study of why so many Americans consider personal services to be degrading would be very useful. It may be a cultural lag, rooted in the level of income and the distribution of income that prevailed in this country and abroad in the eighteenth and nineteenth centuries.

When the average level of per capita income in a country is low, the amount of personal services rendered is probably a function of the distribution of income. It is probably also related to social immobility and inequality of opportunity. In Europe, where there was more inequality and more immobility, there was probably proportionately a much greater consumption of personal services. These services were rendered by the low-born and the poor to the privileged classes and the wealthy. Americans probably tended to associate personal services with this inequality and noticed that there was much less of it in the more democratic United States.

It can be argued, however, that there is nothing inherently degrading in personal services. In a country with a high average level of income, one should expect that a large amount of personal service will be consumed and that a large number of people will find employment in that way. This would be true even if the income distribution were completely egalitarian. High per capita income implies high average output per man. This is likely to mean very high output per man in some industries (where capital can be substituted for labor, and technological change is rapid). Employment, therefore, will probably be primarily in those industries, such as personal services, where output per man advances slowly. Our attitudes toward personal services are not immutable laws of nature; they can be changed. Such a change would, I suspect, reduce unemployment and increase consumer satisfaction.

**INDUSTRIAL ORGANIZATION**

The shift of employment to the service sector carries with it important implications for industrial organization in the United States because the size of the “firm” and the nature of ownership and control are typically different in the two sectors.

In goods, with some notable exceptions, such as agriculture and construction, most of the output is accounted for by large profit-seeking corporations. Ownership is frequently separate from management, and significant market power held by a few firms in each industry is not uncommon.

In the service sector, on the other hand, and again with some exceptions, firms are typically small, usually owner-managed and often noncorporate. Furthermore, nonprofit operations both public and private account for one-third of the sector’s employment.

Table 10 summarizes some of the available information concerning the distribution of employment in different service industries by size of employer. The size distribution in manufacturing is included for comparison. In wholesale trade, retail trade, and selected services, accounting for more than 50 per cent of
the service sector, half of the employment is in companies with fewer than twenty workers. In finance, insurance, and real estate, 40 per cent is in very small firms. Another large fraction of service-sector employment is accounted for by self-employed professionals and domestic servants, not shown in the table. They represent the extreme in small size of employer.

Private (i.e., non-governmental) hospitals are considerably larger than the typical service firm; but even so, more than half the total employment of these institutions is in hospitals with fewer than 500 employees. Similarly, only relatively few private schools or colleges could be classified as large.

Government, which is often referred to as a “huge bureaucracy,” actually includes many small employers. It is worth noting that employment at the local level of government now exceeds that of state and federal (civilian) government combined. One-half of this local employment is in governmental units with fewer than 500 employees.

One statistic that epitomizes some of the trends already discussed is the percentage of the national income originating in business corporations. Ever since the development of the private corporation, its role in the economy has tended to grow; but its relative importance apparently reached a peak about 1955, when corporations accounted for 55.8 per cent of total national income. Since then there has been a tendency for this fraction to decline, and in 1963 the level was 53.8 per cent, approximately the same as in 1948.

Other things being equal, the shift to services tends to increase the relative importance of small firms in the economy. There are, however, forces within many industries that tend to increase the size of the average “firm.” The pressure for consolidation of school districts and other local government units is a notable example. Bank mergers is another. The net effect of these countertendencies is difficult to predict.

### TABLE 10

**Percentage Distribution of Employment by Size of Firm or Employer in Manufacturing and Selected Service Industries**

<table>
<thead>
<tr>
<th>Employment Size</th>
<th>Fewer than 20</th>
<th>Fewer than 500</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Manufacturing (1958)</td>
<td>7</td>
<td>38</td>
</tr>
<tr>
<td>2. Wholesale trade (1958)</td>
<td>47</td>
<td>93</td>
</tr>
<tr>
<td>3. Retail trade (1958)</td>
<td>56</td>
<td>78</td>
</tr>
<tr>
<td>4. Selected services (1958)</td>
<td>57</td>
<td>87</td>
</tr>
<tr>
<td>5. Finance, insurance, and real estate (1956)</td>
<td>41</td>
<td>67</td>
</tr>
<tr>
<td>6. Hospitals (non-governmental, 1963)</td>
<td>n.a.</td>
<td>52</td>
</tr>
<tr>
<td>7. Local government (1962)</td>
<td>n.a.</td>
<td>49</td>
</tr>
</tbody>
</table>


Industries in which small firms account for the bulk of the output typically do not present industrial control problems of the “trust-busting” variety. On the other hand, the growth of such industries may increase the need to guard against the restrictive practices of trade associations and professional organizations. Small firms may pose another problem for the economy because it is alleged that they do not allocate suffi-

---

19 Data on national income originating in corporations and in the total economy are published by the National Income Division of the Office of Business Economics in the *Survey of Current Business* and associated publications.
cient resources to research and other activities with large external benefits.

The growing importance of the non-profit sector will probably pose some disturbing questions about how to promote efficiency and equity in such organizations (cf. the problems with Blue Cross). When non-profit operations represent only a minor exception to an essentially private-enterprise economy, the problem is not very serious. But if we ever reach the stage where non-profit operations tend to dominate the economy, we probably will be faced with the need for radically new instruments of regulation and control.

DEMAND FOR PHYSICAL CAPITAL

There are some portions of the service sector that use large quantities of physical capital. Real estate and the services provided by government roads and highways are notable examples. By and large, however, goods industries tend to be more capital intensive than services. In recent years (1960 through 1963) business expenditures for new plant and equipment in goods industries were approximately three times as great as in profit-seeking service industries; the comparable ratio of output levels in the two groups of industries was only 1.25 to 1.00. Corporate plus non-corporate depreciation charges as a percentage of industry gross product reveal a two-to-one ratio in favor of the goods sector, and balance-sheet data from the Statistics of Income also suggest that capital intensity in the goods sector is roughly double that of the service sector.

There are, to be sure, exceptions to the general rule. The hotel and motel industry has a high capital-to-labor ratio, as do self-service laundries and dry-cleaning establishments, bowling alleys and motion-picture theatres. But in many important service industries, the input of physical capital is small. In barber and beauty shops, for example, labor and materials account for between 80 and 90 per cent of total cost. Another point to be noted is that in the largest service industry, retail trade, an important part of the capital input takes the form of inventories rather than the output of the capital goods industries.

In pointing out the relatively lower capital intensity of most service industries, I am not attempting to revive a "stagnation" theory in any form. The maintenance of high levels of employment and a rapid rate of growth is logically consistent with a decline in the relative importance of physical capital in the economy. The important point is to recognize that, if such a decline occurs because of interindustry shifts, it may be a proper and useful adjustment to new circumstances, with important implications for relative profit levels in different industries. While the national rate of savings may be just as high as before, other forms of investment, such as education, that are not customarily included in savings-investment estimates may take on increased importance.

BUSINESS CYCLES

It is generally believed that the service sector is less sensitive than the goods sector to cyclical fluctuations in production and employment. Daniel Creamer found that the cyclical amplitude of fluctuations of wage and salary payments of commodity-producing industries exceeded that of distributive industries, while the latter were more cyclically sensitive than wage and salary payments in the services. The intersector differences