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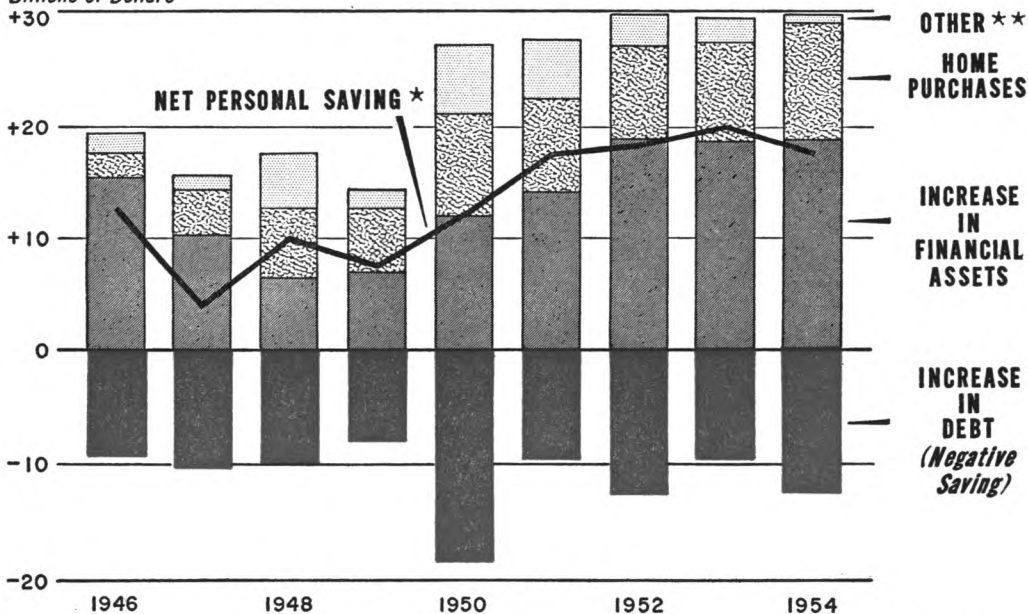
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**Although components of personal saving in the form of financial assets and real property were maintained in 1954, an offsetting rise in personal debt brought about a smaller volume of net saving.**

Billions of Dollars



\*Net savings not exactly equal to sum of components because of statistical discrepancies in source materials.

Source of data: See page 9.

\*\*Net investment in unincorporated business and farms.

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# The Fall in the Rate of Personal Saving

FOR THE PAST YEAR, consumers have been saving a smaller share of their income and spending relatively more on goods and services. What lies behind the drop in the rate of personal saving, and what is its significance?

During the first quarter of 1955, according to preliminary estimates, personal saving amounted to \$18.7 billion, at an annual rate. This represents a drop of more than \$3 billion from a year earlier, despite the rise in personal income during the interval.

The discussion and charts which follow are designed to throw some light on certain key questions: Which of the components of saving accounted for the recent decline in the share of income saved? Are consumers now in a less liquid position? Is personal saving a spendable residual that can be tapped by aggressive salesmanship? Has the drop in the rate of personal saving reduced the flow of funds into savings and other financial institutions? And finally, what has been the role of personal saving in total saving and capital accumulation?

## Content of Personal Saving

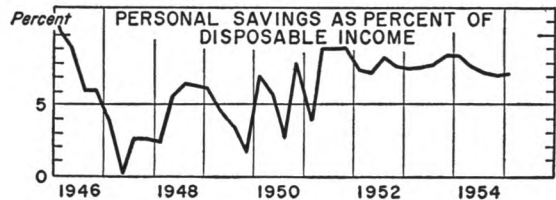
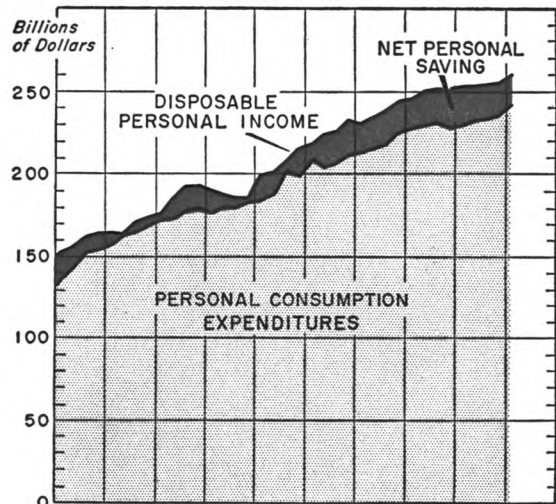
The content of "personal saving" is somewhat broader than might first appear. In national income statistics published by the Department of Commerce, personal saving is obtained by subtracting personal consumption expenditures from disposable personal income (personal income after taxes)<sup>1</sup>. This relation-

<sup>1</sup> Personal saving as thus measured is equal to the increase in private non-corporate assets less the increase in liabilities (debt), exclusive of capital gains or losses. National income statistics also provide an alternative estimate of personal saving, which is secured by deducting saving of corporations and Government from total investment in capital goods. Although both approaches for estimating personal saving as a residual are open to errors in estimating the components from which saving is derived, the possible errors in the one approach are almost wholly distinct from those of the second. The independent estimates serve as a check on each other.

ship is portrayed graphically in an accompanying chart, which covers the postwar period. The chart shows that personal saving has varied widely over the years and, during the past year, has tended to decline.

Personal saving includes more than cash or bank accounts. All uses of current personal

*There have been marked fluctuations in the amount of personal saving during the postwar period. Over the past year, the share of personal income saved has tended to decline.*



NOTE: Income, saving, and consumption expenditures are plotted quarterly at seasonally adjusted annual rates.

Source of data: U. S. Department of Commerce.

income for purposes other than personal consumption expenditures tend to add to personal saving. On the other hand, consumer spending financed from sources other than current income tends to reduce personal saving.

Personal saving may take a variety of forms. One form is a net increase in holdings of financial assets, such as currency and bank deposits, savings and loan shares, the cash value of life insurance policies, and Government and corporate securities. Personal saving also includes increases in private, non-corporate holdings of real property, such as homes and the inventories, buildings, and equipment of unincorporated businesses and farms (less depreciation on existing property). On the other hand, increases in consumer debt, home mortgage debt, and debt of unincorporated business and farms are counted as negative saving. Repayment of personal debt, correspondingly, is counted as personal saving.

Since personal income and consumption refer to the entire private, non-corporate sector of the economy, personal saving (as measured by the difference between the two) includes many items that some people might not think of as "personal" or "saving". Not only are consumers included, but also unincorporated business and farms, non-profit organizations, private pension funds, and welfare and trust funds. The reason for including the latter is the unavailability of data to make a segregation.

In addition, the estimate of personal saving is affected by items included or excluded from disposable personal income and personal consumption expenditures. For example, the purchase of homes is not included in "consumption" expenditures, but purchases of autos and other consumer durable goods are included<sup>2</sup>. Thus, "personal saving" is increased by relatively greater expenditures on houses (assuming no change in other saving) but personal saving is reduced by greater spending on cars (assuming no change in other consumption expenditures).

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<sup>2</sup> Another important point is that capital gains are not included in income and therefore not in saving. Also, estimated depreciation on homes and property of unincorporated business is deducted from income before arriving at personal saving.

Finally, it is important to note that since saving is a relatively small residual between disposable income and consumption expenditures, as brought out in the chart, a comparatively small error in the estimates of income or consumption will produce a relatively large error in the estimate of personal saving. Therefore, any current data on personal saving must be cautiously interpreted, since the figures are subject to substantial revision as more complete information becomes available.

The complex nature of personal saving explains why it is one of the least understood concepts in national income statistics, and why analysis of trends in personal saving requires special care. For example, since personal saving includes that of unincorporated business (as noted above), care must be exercised not to interpret an increase in business inventories or property as an increase in the potential spending power of consumers. Total personal saving does not represent a spendable residual, since part of it may already have been invested in homes and business property, used to retire debt, placed in non-liquid assets, or absorbed by "contractual" obligations such as pension reserves.

### Rate of Personal Saving

Personal saving, viewed as a share of personal income, is a widely used measure of savings trends. This latter relationship is portrayed in the bottom strip of the chart, showing personal saving as a percent of disposable personal income in the postwar period. The ratio has shown marked fluctuations; during the last three quarters of 1954 it was clearly on the decline, and then leveled off in the first quarter of 1955.

The extreme variation in the share of personal income saved can be further illustrated by reference to the experience of the past quarter of a century. At the peak of the business boom in 1929, personal saving amounted to 41½ percent of disposable income. Following the crash, the rate of saving declined sharply. During the three depression years, 1932-34, personal saving became negative, indicating that current consumption expenditures were

larger than current income, with the gap "financed" by extension of debt and drawing down past savings. As recovery from the depression progressed, the rate of personal saving gradually rose to a level of nearly 5 percent before the outbreak of World War II, thus exceeding the 1929 level. During the war years, because of shortages of available goods, price controls, and patriotic appeals to save, personal saving increased to the unprecedented height of over 20 percent of disposable income. Consumers thus emerged from the war with a tremendous backlog of accumulated savings, much of which was in highly liquid form.

With the removal of wartime controls, the reappearance of a wide variety of consumer goods, and the backlog of pent-up demands, the rate of personal saving fell drastically in the early postwar period, as brought out in the chart. Consumers embarked on a buying spree which brought personal saving down to only 0.2 percent of disposable income in the second quarter of 1947. Although the rate of saving then recovered somewhat, the backlog of demands induced by wartime shortages continued to make itself felt in a relatively low volume of personal saving through 1949.

In early 1950 the rate of personal saving began to rise. The outbreak of the Korean War, especially the military setbacks, produced a drastic change in consumer expectations, however. Fear of a third World War was aroused, and there was vivid recollection of wartime shortages and inflation. Two waves of panic buying ensued, by business and consumers alike, before heavy defense spending even got under way. The results are shown on the chart portraying personal saving as a share of income. There was a sharp decline in the rate of saving in the third quarter of 1950, strong recovery in the fourth quarter, and another sharp drop in the first quarter of 1951, when the effects of the Chinese intervention were felt.

Starting with the second quarter of 1951, a major increase occurred in the rate of personal saving. By this time, apparently, the public no longer considered the threat of general war to be acute. However, the prospect of a long stale-

mate, along with high prices and taxes, was a matter of concern to consumers. Uncertainty about the future and dissatisfaction with high prices helped to produce a higher rate of personal saving from 1951 to 1953. Other factors working in the same direction were a reaction from the earlier buying spree, along with controls over consumer credit and production of consumer durable goods.

The increase in the rate of personal saving during 1951 was an important factor in stemming inflationary pressures connected with rising defense expenditures and business spending on plant and equipment, which lasted through the first half of 1953. In this period, personal saving rose as high as 9 percent of disposable income. The continuation of the high rate of saving from mid-1953 through the first quarter of 1954 was somewhat deflationary, however, in view of the downward trend of defense and business spending.

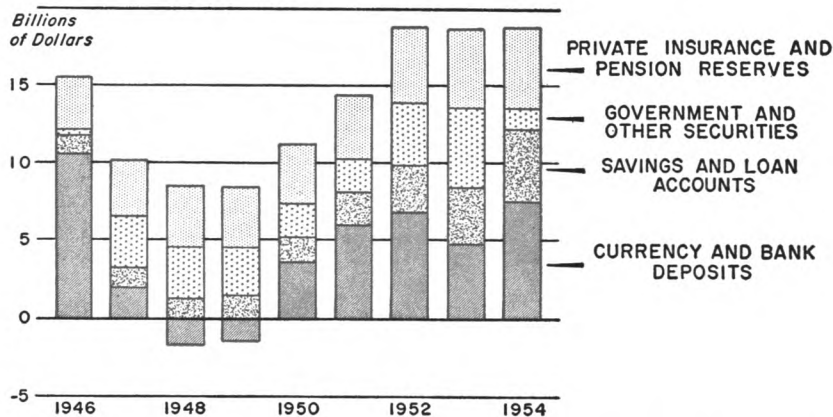
The most recent phase of the personal saving trend began with the second quarter of 1954, when the share of income saved began to decline, with a larger share of income thus devoted to consumption expenditures. From the first quarter of 1954 to the first quarter of 1955 (the latest date for which figures are now available), the rate of personal saving fell from 8.6 percent to 7.2 percent of disposable income. (See chart.) It is important to keep in mind that disposable personal income was rising in this whole period, so that a larger share of an expanding personal income was spent for consumption purposes. This development was a major factor in offsetting the sharp decline in defense spending and inventory purchases during the latter phase of the recession of 1953-54, thus helping to keep that recession short and mild. If the savings rate of the first quarter of 1954 had prevailed during the following year, consumer expenditures would have been over \$3 billion smaller.

### **Changes in Composition**

To throw more light on fluctuations in the rate of personal saving, a closer examination must be made of the components of personal

## PERSONAL SAVING IN FORM OF INCREASED HOLDINGS OF FINANCIAL ASSETS\*

Personal saving in the form of financial assets during 1954 was maintained at about the same level as in the previous two years, despite a change in composition.



\* Includes increase in all private, non-corporate holdings. Source of data: Securities and Exchange Commission.

saving mentioned earlier.<sup>3</sup> As brought out in the cover chart, the major components of personal saving are increases in holdings of financial assets, net purchases of homes, and net investment in unincorporated business and farms, offset by increases in personal debt. Although components of personal saving in the form of financial assets and real property were maintained in 1954, an offsetting rise in personal debt brought about a smaller volume of net saving.

A wide variation from one year to another is evident in the relative importance of the components of saving. Changes in most components of saving result either from switches in asset holdings, or opposite and offsetting changes in debt and assets. When net purchases of homes increase, for example, there is a partially offsetting rise in home mortgage debt. None of the components of saving bears a constant relation to net personal saving. Thus, the various components must be studied together in order to understand the behavior of saving. Total personal saving is relatively

more stable than any of its individual components.

*Holding of Financial Assets.* As brought out in the cover chart, personal saving in the form of increases in holdings of financial assets generally represents over half of all positive saving. The relative importance of financial assets in current saving has varied widely in the postwar period, however, ranging between one-third and four-fifths of positive saving. In each of the past three years, increases in personal holdings of financial assets have exceeded \$18 billion, or more than 60 percent of positive personal saving.

The composition of saving in the form of financial assets is shown in greater detail in an accompanying chart. During 1954, sharp increases over the previous year in bank deposits and savings and loan accounts offset the much smaller gain in security holdings. Currency and bank deposits have displayed the greatest variation, ranging from two-thirds of increases in personal holdings of financial assets in 1946 to a negative position in 1948 and 1949.

Additions to personal holdings of Government and corporate securities have also varied widely from one year to another. In 1954, the increase in securities was only about one-fourth as large as in the previous year. Increases in personal holdings of U. S. savings

<sup>3</sup> Data on the components of personal saving are based on estimates made by the Securities and Exchange Commission. As contrasted with the income approach used by the Department of Commerce in estimating net personal saving, the SEC uses a balance sheet approach. In the latter approach, estimates are made of changes in holdings of specified types of assets and liabilities of individuals between two given dates. The components of personal saving, as measured by SEC, do not add exactly to the net personal saving estimate of Commerce. However, an annual reconciliation of SEC and Commerce estimates is contained in the *National Income Supplement of the Survey of Current Business*.

bonds and municipal and corporate securities were largely offset by a decline in holdings of marketable U. S. securities.

Increases in personal holdings of savings and loan accounts have been steadily larger since 1951, after showing slow growth from 1946 to 1950. Additions to private insurance and pension reserves have shown constant growth in the entire postwar period.

The sum of currency and bank deposits, savings and loan shares, and securities constitutes the liquid saving of individuals. This amount is ready purchasing power, since it consists of cash or assets that can be readily converted into cash. Liquid saving during 1954 amounted to over \$13 billion, virtually unchanged from the amount saved in liquid form in the previous year.

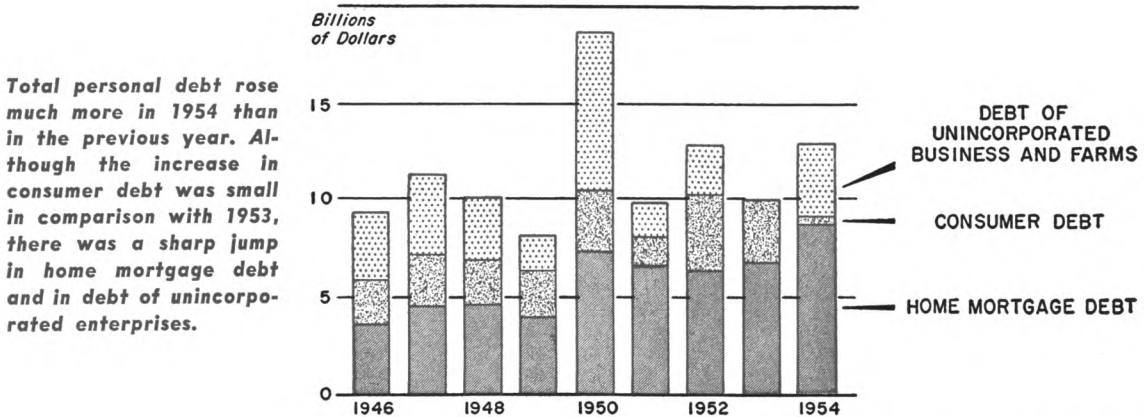
Personal saving in the form of life insurance and pension reserves, although it is a financial asset, partakes of the nature of contractual saving. Payments into such funds usually involve long-term contracts calling for regular payment, tending to make this a stable component of personal saving. People hesitate to draw upon the cash value of insurance or annuity policies, except in case of emergency. Thus, these funds are not generally regarded by holders as a potential source of spending

on consumer goods.

*Net Investment in Homes.* Acquisition of homes has been the second most important form of personal saving in the postwar period. As given on the cover chart, net purchases of homes consist of personal expenditures on new non-farm homes (plus a small amount of construction by nonprofit associations) less depreciation on existing properties. This form of personal saving in 1954 amounted to nearly \$10½ billion, up sharply from the previous year. Net investment in homes, as defined above, does not take into account the increase in home mortgage debt that accompanied the acquisitions, however. If such debt is offset against the net increase in housing assets, the increase in homeowners' equity is obtained. Taking into account the record increase in home mortgage debt, the increase in homeowners' equity was not as large in 1954 as in the previous year.

*Net Investment in Business and Farms.* This component of personal saving consists of increased holdings by unincorporated business and farms of inventories, new construction, and producers' durable equipment, less depreciation on existing property. To obtain the increase in equity in unincorporated business and farms, the value of the real property

### INCREASE IN PERSONAL DEBT\* (Negative Saving)



Total personal debt rose much more in 1954 than in the previous year. Although the increase in consumer debt was small in comparison with 1953, there was a sharp jump in home mortgage debt and in debt of unincorporated enterprises.

\* Private non-corporate debt to corporations and financial institutions. (The change during 1953 in the debt of unincorporated enterprises was negligible, and is not shown on chart.)  
Source of data: See note at end of article.

acquired must be reduced by an increase in business and farm debt during the period.

As portrayed on the cover chart, net investment in unincorporated enterprises generally constitutes a small part of personal saving. However, changes in this component since World War II have been largely responsible for radical fluctuations in the rate of personal saving. The sharp rise in personal saving between 1949 and 1950 can be traced mainly to a jump in net investment in business and farms. On the other hand, during 1954 a sharp drop in the net investment in unincorporated business and farms was a major factor in reducing the level of personal saving. This development clearly reflects the recession climate of 1954.

*Increases in Personal Debt.* The final component of personal saving is negative saving in the form of increases in personal debt.<sup>4</sup> Such increases are an offset to positive saving in the form of financial assets and real property in arriving at net personal saving.

A breakdown of the annual increases in personal debt since 1946 is presented in an accompanying chart. Home mortgage debt has generally represented a growing share of the increase in total debt during this period. On the other hand, there have been radical fluctuations in the rate of increase of consumer debt and debt of unincorporated enterprises. During 1954, a substantial rate of increase in total personal debt was a principal factor in the net decline in personal saving. Although the increase in consumer debt was slight compared with the previous year, debt of unincorporated enterprise jumped sharply. There was also a larger addition to home mortgage debt in 1954 than in 1953.

### **Relation to Total Saving and Investment**

Personal saving is only one part, and a highly variable part, of total net saving. The other components include corporate saving and Government saving (if any). Corporate saving consists of retained earnings — that is, net profits not distributed as dividends. The

bulk of corporate saving is invested in real assets by the corporations themselves. Retained earnings have, in fact, been the principal source of new funds for corporations for a number of years. Some corporate saving, however, takes the form of increased holdings of cash and other financial assets.

Government saving requires special explanation. In national income accounting, any structures, roads, or equipment acquired by Government are not counted in the capital stock. All goods purchased by Government units are treated as though they were consumed as soon as acquired. Thus, by definition, Government units do not invest in real assets, but they do save or dissave by operating with a surplus or deficit. Government saving, if any, is therefore equal to the surplus on income and product transactions.

The relative importance of personal, corporate, and Government saving varies markedly from one period to another. Of the total net saving in the U. S. since World War II, personal saving accounted for 53 percent, corporate saving, 33 percent, and Government saving, 14 percent.<sup>5</sup> On the other hand, from 1929 to 1941 as a whole, personal saving was considerably larger than total net saving, since both corporations and Government units showed negative saving. During the war years, the huge deficits of the Federal Government more than offset the unprecedented volume of personal saving plus the small amount of corporate saving. For the war period as a whole, the net saving of the economy was negative. These episodes highlight the difference between personal saving and total saving.

For any individual or any group in the economy, such as the private, non-corporate sector, there is no necessary relationship between amounts saved and amounts invested—i.e., spent on capital goods. Total personal saving is generally much larger than the part used for net investment in homes and unincorporated business and farms. The excess is available to finance corporate expenditures on plant and equipment or government deficits.

<sup>4</sup> Includes only the increase in debt owed to corporations and financial institutions by the private, non-corporate sector of the economy. Intra-personal debt is cancelled out.

<sup>5</sup> Almost the entire Government surplus occurred in the Federal Government component, mainly as a result of the net inflow of funds into the Social Security surplus and other Federal trust funds.



In the period from 1946-1954 as a whole, net investment by the "personal" sector absorbed only three-fourths of personal saving. This did not occur in all years, however. In 1947, 1948, and 1950, the personal sector obtained net financing from other sectors—mainly from the Federal Government. With regard to the corporate sector in the postwar period, only about three-fourths of expenditures on construction, equipment, and inventories were financed from internal sources (depreciation allowances and retained earnings). Personal saving supplied most of the balance. The above relationships are typical over long periods, i.e., an excess of investment over saving in the corporate sector, with the reverse holding true for the personal sector. The position of Government units, on the other hand, has changed frequently and widely from surplus to deficit.

### Summary

Having examined the nature, trends, and composition of personal saving, as well as its relation to total saving and capital formation, what conclusions may be drawn with reference to the questions posed at the beginning of this article?

1. The drop in the rate of personal saving in 1954 was mainly a matter of a change in saving in the form of real property, although positive motives to maintain consumption purchases probably played some role. During 1954 total equity in real property declined by an estimated \$1.2 billion, compared with an increase of \$4 billion in the previous year. Personal saving in the form of equity in homes increased in 1954, although at a lower rate than in 1953. This was more than offset, however, by a decrease in equity of more than \$3 billion in unincorporated business and farms. During 1953, in contrast, personal saving in the form of equity in unincorporated enterprises had risen by \$2 billion.

The 1954 decline in net equity of unincorporated enterprises is not a surprising development, considering the recession that occurred. In view of the strong pace of business activity in 1955, a recovery in this component of personal saving could reasonably be expected.

This suggests that the decline in the rate of net personal saving may soon be reversed.

2. Despite the drop in net personal saving in 1954, saving in the form of financial assets was maintained at about the same rate as the previous two years. This component of saving in 1954 amounted to more than \$18 billion, of which \$13 billion was in liquid form (currency, deposits, saving and loan shares, and securities). Consequently, the flow of personal saving into financial institutions was not impaired. Most classes of financial institutions recorded a record inflow of funds.

Liquid savings of the personal sector increased at about the same rate in 1954 as in the previous two years. During 1954, liquid personal saving amounted to nearly half of positive personal saving and to about three-fourths of net personal saving. Liquid saving (except that part representing the liquid assets of unincorporated business) is the portion of personal saving which represents the "discretionary" spending power of consumers; this is the amount which might be tapped by better products, attractive prices, or intensive sales efforts.

3. During 1954, as in most years, only a part of personal saving was absorbed in acquisition of physical assets by the personal sector of the economy. Thus, nearly two-fifths of net personal saving in 1954 was made available to other sectors of the economy. In this manner, personal saving helped to finance corporate expenditures on plant and equipment as well as government deficits.

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### Note on Sources

1. *Net personal saving.* Source of data is the U. S. Department of Commerce. Since the 1954 figure is subject to revision, the cover chart shows an amount which is mid-way between the Commerce estimate based on disposable personal income less personal consumption expenditures, and the alternative Commerce estimate based on gross investment less corporate and government saving. (See footnote 1, page 3.)
2. *Components of personal saving.* Source of data is the Securities and Exchange Commission. For 1954, however, components in the form of net investment in unincorporated enterprises and increases in personal debt were partly estimated by the Federal Reserve Bank of Cleveland.

# Key Items of City Finance

## 70 Medium-Size Ohio Cities

COMPARATIVE DATA on expenditures, revenue, debt, and other significant items of municipal finance for all Ohio cities, as of the year 1953, have recently been made available by the State government.<sup>(1)</sup> The 139 cities embraced by the compilation have populations ranging from 5,000 up to close to a million. Total financial outlays covered by the report add up to about \$700 million for the year 1953.

As one among many possible ways of utilizing this abundant source material, it may be of interest to focus attention momentarily on the medium-size cities of the State, and to arrange the financial data according to groups of cities of broadly comparable population brackets. Included in the material selected for exhibit below are data bearing on 70 Ohio cities, the populations of which range from 10,000 to less than 100,000, according to the 1950 Census count.<sup>(2)</sup> Such middle-size cities are, as is well known, unusually numerous in Ohio; they provide a significant share of the economic sinews of both state and nation.

Within the medium-size group of cities, three sub-groups are distinguished below. One is the size-group of 20,000 to 100,000, exclusive of "suburban" cities; these number 20, rang-

ing in size from Springfield, with 78,508, down to Chillicothe with 20,133. A second group comprises Ohio cities from 10,000 to 20,000, exclusive of suburban cities; these number 28, ranging in size from Tiffin, with 18,952, down to Conneaut, with 10,230. The third group includes all the suburban cities that have been excluded from the first two groups, ranging in size from Lakewood, with 68,071, down to Girard with 10,113. The reason for the separate listing of the suburban cities in the illustrative materials which follow lies in the fact that such cities, because of their connection with the larger urban areas to which they are related, are subject to special factors affecting both needs and resources.<sup>(3)</sup>

The year 1953 is the latest for which comparable information for the various cities is available. Despite the numerous special factors which may have been in operation during that year, the outlines of the variations among cities in respect to selected items of municipal finance are thought to be broadly indicative of the present-day differences among the cities.

### Cities of 20,000 to 100,000

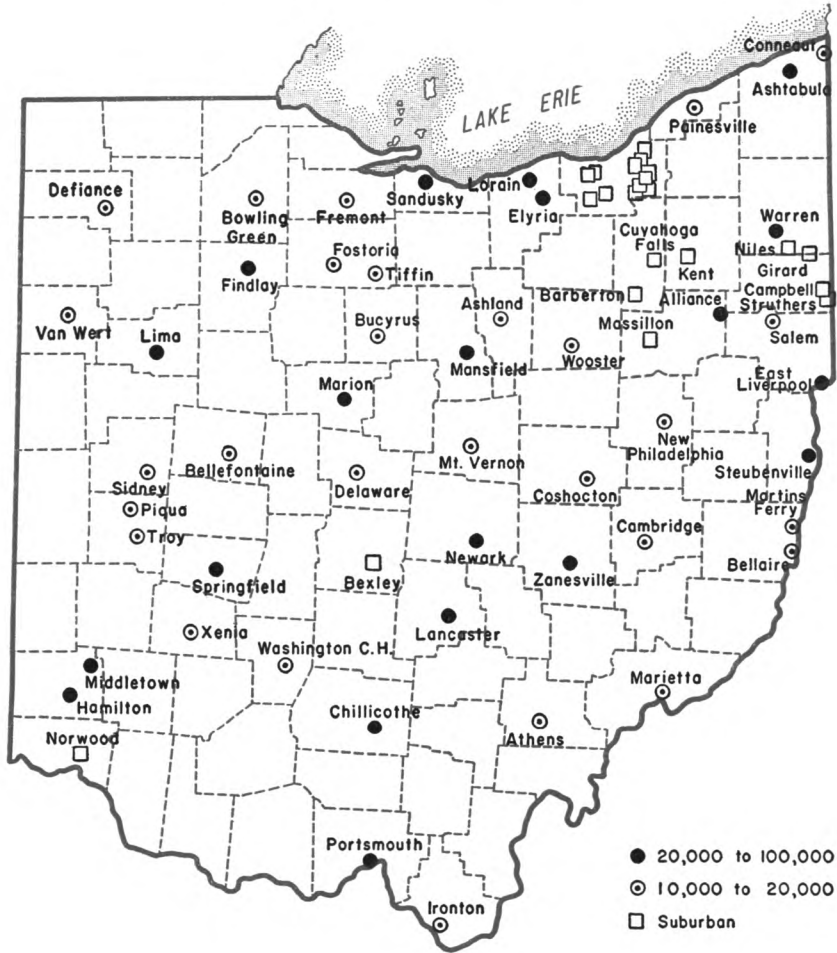
General expenditures by the 20 Ohio cities of 20,000 to 100,000 population (excluding suburban cities) averaged \$32.20 per capita

(1) *Comparative Statistics, Cities of Ohio, 1953*, by the Auditor of State, Columbus, 1955.

(2) The eight largest cities of Ohio, data for which are available in the State auditor's compilation, are not included in the cities selected for special treatment here. They are: Cleveland, Cincinnati, Columbus, Toledo, Akron, Dayton, Youngstown and Canton. Financial outlays of these cities (for the year 1952) were discussed in "Outlays by Municipal Governments", published in the May 1954 issue of this *Review*.

(3) Suburban cities, for this purpose, are those which are included by the Bureau of Census as parts of the "urbanized areas" of Ohio, where the central city is of 100,000 or more population. (An exception is made in the case of Warren, which is not shown here as a "suburban" city, although it might be so considered under a strict application of the criterion.)

## LOCATIONS OF THE 70 OHIO CITIES



NOTE: The following suburban cities of Cuyahoga County are indicated, but not named, on the map: Lakewood, Cleveland Heights, Euclid, East Cleveland, Parma, Shaker Heights, Garfield Heights, Maple Heights, South Euclid, Berea, University Heights, and Rocky River.

during 1953. Such expenditures include all outlays for current operating expenses of the city governments, except outlays for municipally operated public utilities or city-operated hospitals. Per-capita general expenditures, as well as other financial data, for each of the 20 cities in the group are shown on the accompanying table. The table also shows for each city the number of manufacturing employees per 1,000 population, a figure which is useful as background on degree of industrial development. (4)

For individual cities within the 20,000 to 100,000 size group, per-capita general expenditures

during 1953 ranged from \$39.79 in Middletown to \$22.97 in Zanesville, as shown by the accompanying chart. These expenditures pertain to the city governments only, and do not include outlays by overlapping taxing bodies such as county governments and school districts.

Almost all of the cities in the group allocated a larger share of their general expenditures to protection (fire, police, traffic lights, etc.) than to any of the other three major functions listed separately on the table. Middletown, which had the highest per-capita expenditures of the cities in its size-class, spent a larger proportion of its 1953 budget on protection than did any of the other listed cities.

Expenditures for sanitation (street cleaning, sewers, and garbage and refuse disposal)

(4) The number of manufacturing employees in establishments located in each city was obtained from the *Directory of Ohio Manufacturers*, Department of Industrial Relations, State of Ohio, Columbus, 1954. The data are for the year 1953, and are compared with U. S. Bureau of the Census population data for the year 1950.

**OHIO CITIES OF 20,000 to 100,000<sup>1</sup>**  
Municipal Expenditures, Revenue, and Debt, 1953

CITY	Population 1950	Manufacturing Employees in 1953 per 1000 Population	GENERAL EXPENDITURES <sup>2</sup>					Property Tax as % of Tax Revenue	General Bonded Debt per \$1,000 Property Valuation
			Total per Capita	% for Protection	% for Highways & Bridges	% for Sanitation	% for Health & Welfare <sup>3</sup>		
Springfield.....	78,508	235	\$36.94	33.9%	15.1%	10.9%	11.2%	36.4%	\$31.85
Hamilton.....	57,951	339	37.15	36.3	9.1	9.5	10.0	40.5	22.73
Lorain.....	51,202	289	36.07	33.8	14.6	10.7	9.4	71.6	21.43
Lima.....	50,246	298	33.54	30.4	20.5	21.5	5.1	45.4	24.34
Warren.....	49,856	494	38.40	32.4	20.4	11.8	2.2	35.1	21.03
Mansfield.....	43,564	439	30.52	34.6	16.6	14.1	11.0	50.3	.16
Zanesville.....	40,517	259	22.97	30.8	30.9	10.0	5.0	44.2	6.47
Portsmouth.....	36,798	174	30.15	37.1	15.5	9.6	7.7	63.7	10.69
Steubenville.....	35,872	194	36.47	28.4	23.5	7.3	7.1	71.3	5.87
Newark.....	34,275	277	24.62	38.4	22.2	8.8	3.4	48.9	1.71
Marion.....	33,817	203	28.13	34.7	17.4	13.6	9.7	49.7	19.71
Middletown.....	33,695	413	39.79	38.9	15.2	1.6	8.4	69.8	30.69
Elyria.....	30,307	461	37.89	31.4	20.8	13.0	2.5	65.2	33.44
Sandusky.....	29,375	335	29.17	38.8	14.5	8.7	5.7	59.3	6.08
Alliance.....	26,161	303	25.40	32.7	18.4	7.9	11.0	54.6	13.70
East Liverpool...	24,217	84	26.52	32.8	19.1	10.5	10.4	55.4	5.54
Lancaster.....	24,180	314	26.85	28.0	17.5	15.7	3.2	39.6	9.03
Findlay.....	23,845	217	24.62	29.7	18.8	11.0	2.6	60.6	23.12
Ashtabula.....	23,696	229	30.76	38.0	19.9	12.8	2.3	62.4	—0—
Chillicothe.....	20,133	198	25.25	35.5	23.4	9.5	1.9	49.6	4.76
Average for Group		296	32.20	33.9	17.8	11.1	7.2	52.2	16.87

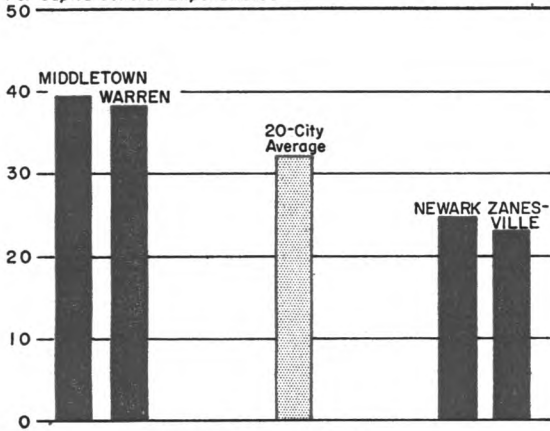
<sup>1</sup>Excludes "suburban" cities which are shown separately on another table.

<sup>2</sup>Excludes public utility expenditures and expenditures for municipally operated hospitals.

<sup>3</sup>Includes expenditures for Board of Health Administration, treatment and prevention of disease, regulations and inspections, poor and outdoor relief, workhouse, detention home, etc.

Per-capita general expenditures ranged from \$40 in Middletown to \$23 in Zanesville (size-group 20,000-100,000).

Per Capita General Expenditures \*



\* Excludes expenditures for public utilities and municipally-operated hospitals.

accounted on the average for 11 percent of general expenditures by the 20 Ohio cities in the 20,000 to 100,000 size-group. Lima spent a larger share of its general budget for sanitation than did any other city in its group, with 21.5 percent of total expenditures going for this purpose. Middletown, at the other extreme, spent only 1.6 percent of its budget on sanitation.

Less than half of all revenue made available to municipal governments in Ohio is obtained from taxes. Non-tax revenues are collected by cities from such sources as state and federal grants, sale of services such as sewer rental and safety inspections, court fines, and parking meters. The major source of tax revenue for municipalities is the property tax, with lesser amounts being collected from sales taxes, license fees, admission taxes, and income taxes. The importance of property taxes to total tax revenue varies from city to city as the data in the accompanying table show. In Lorain, for example, property taxes provided 71.6 percent of total tax revenue, while Warren obtained only 35.1 percent of its tax revenue from the property tax. A city income tax in Warren, however, provided almost as much revenue as the property tax there.

Springfield and Lancaster were the only other cities of the size-class to obtain revenue from income taxes during 1953; in each of those cities, property taxes represented a lower proportion of tax revenue than for the other cities in the group.

General bonded indebtedness for each city has been shown on the accompanying table in terms of debt per \$1,000 taxable property valuation. Admittedly, methods of property valuation for purposes of taxation are subject to considerable variation among individual cities. Nevertheless, state legislation is based on this criterion. Ohio law regulates the extent of indebtedness which may be incurred by cities, limiting such debt to 5 percent of property valuation with the approval of the electors. (The exemption of certain types of bonds from this rule, however, makes possible a total indebtedness for a city which may exceed the 5 percent limit.)

For the cities listed above, bonded debt ranged from \$33.44 per \$1,000 property valuation in Elyria to \$.16 in Mansfield. Ashtabula was the only city in this group to be without any general debt at the end of 1953. In addition to the general debt subject to the 5 percent limit described above, most cities had outstanding, self-supporting public utility bonds (general obligation or mortgage revenue), special assessment bonds payable primarily from taxes on benefited property, and certificates of indebtedness. As an offset to total indebtedness, however, each city maintained bond retirement funds in the form of cash and investments, which have not been taken into account in the above computations.

### Cities of 10,000 to 20,000

The 28 Ohio cities of 10,000 to 20,000 population (exclusive of suburban cities) reported general expenditures during 1953 amounting to an average of \$30.15. Although this represented a slightly smaller per-capita expenditure for the group than the 20,000 to 100,000 size-class, previously discussed, the difference is probably not statistically significant. The range of per-capita general expenditures by individual cities within the 10,000 to

**OHIO CITIES OF 10,000 TO 20,000<sup>1</sup>**  
Municipal Expenditures, Revenue, and Debt, 1953

CITY	Population 1950	Manufacturing Employees in 1953 per 1000 Population	GENERAL EXPENDITURES <sup>2</sup>					Property Tax as % of Tax Revenue	General Bonded Debt per \$1,000 Property Valuation
			Total per Capita	% for Protection	% for Highways & Bridges	% for Sanitation	% for Health & Welfare <sup>3</sup>		
Tiffin.....	18,952	189	\$25.80	38.2%	25.7%	7.8%	4.2%	41.7%	\$ 1.29
Piqua.....	17,447	205	35.13	29.0	11.2	16.1	11.0	47.5	1.95
Fremont.....	16,537	266	34.47	27.7	21.8	13.6	7.6	49.9	19.50
Ironton.....	16,333	179	22.90	32.1	18.3	8.0	3.1	61.0	21.79
Marietta.....	16,006	247	25.06	27.6	22.6	21.1	2.3	33.3	4.61
Cambridge.....	14,739	141	22.76	33.9	25.1	2.3	1.6	49.0	5.47
Painesville.....	14,432	496	38.00	32.0	16.8	13.1	1.5	59.7	17.88
Fostoria.....	14,351	205	28.18	28.0	22.4	15.2	5.4	47.5	24.62
Ashland.....	14,287	280	27.32	28.2	22.4	6.7	3.6	54.1	12.76
Wooster.....	14,005	226	28.75	29.3	25.4	0.1	2.7	56.3	14.98
Martins Ferry..	13,220	171	17.53	29.0	24.9	7.1	5.0	38.2	12.68
New Philadelphia.	12,948	110	23.90	33.6	26.8	10.8	2.4	48.9	11.53
Xenia.....	12,877	68	28.48	32.7	18.9	23.0	3.0	40.5	.61
Salem.....	12,754	451	27.82	25.7	21.9	8.7	5.9	55.3	12.32
Bellaire.....	12,573	95	16.23	39.9	30.2	4.0	4.7	31.4	.02
Mt. Vernon.....	12,185	304	29.74	34.7	21.9	8.1	0.9	75.2	8.84
Bowling Green..	12,005	10	25.82	28.5	18.7	16.3	0.8	44.3	.74
Delaware.....	11,804	148	29.88	24.7	23.2	21.7	3.6	52.4	22.07
Coshocton.....	11,675	282	27.25	32.8	4.1	4.4	35.1	45.1	1.32
Athens.....	11,660	95	29.31	18.1	28.3	15.2	2.5	52.5	.11
Sidney.....	11,491	465	34.86	30.9	27.1	21.4	1.8	70.7	7.38
Defiance.....	11,265	476	79.85	10.0	12.6	—0—	1.0	59.1	34.77
Troy.....	10,661	384	47.33	19.9	19.9	15.5	2.5	58.4	12.00
Washington Court House...	10,560	85	24.39	40.7	26.2	10.0	3.0	31.3	3.59
Van Wert.....	10,364	202	29.59	34.1	22.2	13.9	2.3	53.9	2.19
Bucyrus.....	10,327	300	35.45	29.1	17.7	19.2	1.7	53.9	1.52
Bellefontaine....	10,232	161	35.68	22.8	15.6	22.4	1.8	32.5	12.28
Conneaut.....	10,230	144	24.61	39.4	29.6	6.2	2.5	55.6	—0—
Average for Group		228	30.15	28.4	20.6	12.9	4.3	50.0	9.62

<sup>1</sup>Excludes "suburban" cities which are shown separately on another table.

<sup>2</sup>Excludes public utility expenditures and expenditures for municipally operated hospitals.

<sup>3</sup>Includes expenditures for Board of Health Administration, treatment and prevention of disease, regulations and inspections, poor and outdoor relief, workhouse, detention home, etc.

20,000 group was wider than was the case for the larger size-class. Defiance had the largest per-capita general expenditures in 1953 of any city in its group, as seen from the accompanying table. The amount for the city was \$79.85, although about half of general expenditures was attributable to a special item in connection with waterworks expansion. The second highest per-capita expenditure for the

10,000 to 20,000 size-group was reported for Troy, with a per-capita outlay of \$47.33, while Bellaire had the smallest amount at \$16.23 per capita.

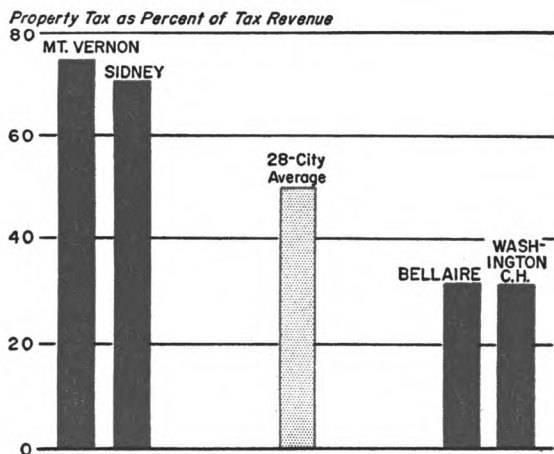
As was the case with the cities of the larger size-class, cities in the 10,000 to 20,000 group spent a larger share of general expenditures for protection than for the other functions shown on the table. Among the smaller cities,

Washington Court House used the largest share of general expenditures (40.7 percent) for protection.

The smaller cities spent a somewhat greater proportion of general expenditures on highways and bridges than did the larger cities. Highway and bridge expenditures accounted for 20.6 percent of general expenditures by cities in the 10,000 to 20,000 class compared with only 17.8 percent of expenditures by cities of 20,000 to 100,000. Bellaire allotted a larger share of its expenditures for highways and bridges than did any other city in its group, while Coshocton, at the other extreme, used only 4.1 percent of its budget for highways and bridges.

Mount Vernon and Sidney had the highest ratios of property tax revenue to total tax revenue of the 28 cities in the 10,000 to 20,000 group, as shown by the accompanying chart. At the other extreme, Bellaire and Washington Court House obtained, respectively, 31.4 percent and 31.3 percent of their total tax revenues from property taxes. Since none of the cities in this size class had income taxes, the property tax was the largest single source of tax revenue for each city in the group.

*Property taxes accounted for 75% of total tax revenue in Mount Vernon, a larger share than in any of the other Ohio cities of the size group (10,000-20,000).*



General bonded debt outstandings of the 28 non-suburban Ohio cities in the 10,000 to 20,000 size class averaged \$9.62 per \$1,000 property valuation, a considerably smaller sum than was the case for cities in the 20,000 to 100,000 group. The largest debt in relation to property valuation was reported by Defiance, with \$34.77 outstanding per \$1,000 valuation. Bellaire, Athens, Xenia, and Bowling Green each had bonded indebtedness of less than one dollar per thousand valuation, while Conneaut was the only city in the group with no general debt.

### Suburban Cities

The 22 Ohio suburban cities with populations ranging from 10,000 to 100,000 had larger per-capita general expenditures on the average than did the cities of either of the two classes previously discussed. For individual suburban cities, per-capita general expenditures ranged from \$62.02 in Shaker Heights to \$19.04 in Kent. The average for the group was \$34.81 as indicated on the following table.

As was the case with the other cities, protection expenditures accounted for the largest share of the suburban cities' consolidated budget. Outlays for protection averaged about one-third of general expenditures, while for individual suburban cities, the proportion ranged from 44.3 percent in University Heights to 25.5 percent in Maple Heights. Outlays by suburban cities for highways and bridges were less as a percentage of total expenditures than was found to be the case for the non-suburban cities.

The suburban cities tended to obtain a relatively large proportion of tax revenue from property taxes. In Parma, 80.8 percent of tax revenue was collected from property taxes, the largest ratio for any of the cities shown on the table. Both Euclid and South Euclid obtained 79.6 percent of tax revenues from property taxes. At the other extreme, Struthers collected only 29.9 percent of its revenue from property taxes. An income tax in that city provided a substantial portion of total

## OHIO SUBURBAN CITIES OF 10,000 TO 100,000

Municipal Expenditures, Revenue, and Debt, 1953

CITY	Population 1950	Manufacturing Employees in 1953 per 1000 Population	GENERAL EXPENDITURES <sup>1</sup>					Property Tax as % of Tax Revenue	General Bonded Debt per \$1,000 Property Valuation
			Total per Capita	% for Protection	% for High- ways & Bridges	% for Sanitation	% for Health & Welfare <sup>2</sup>		
Lakewood . . . . .	68,071	50	\$35.03	31.1%	10.6%	22.1%	3.5%	65.3%	\$26.54
Cleveland Heights	59,141	8	43.79	30.5	17.3	22.7	2.2	67.1	15.88
Euclid . . . . .	41,396	135	38.73	34.9	16.9	17.0	1.4	79.6	11.68
East Cleveland . . .	40,047	12	30.08	40.3	11.4	18.4	3.4	58.3	4.00
Norwood . . . . .	35,001	357	35.73	40.4	12.4	21.8	1.5	71.3	30.84
Massillon . . . . .	29,594	163	27.35	35.2	12.5	16.5	9.5	51.4	2.99
Cuyahoga Falls . . .	29,195	87	30.98	32.4	12.6	24.7	3.7	60.4	3.02
Parma . . . . .	28,897	2	33.44	35.2	13.9	15.3	5.7	80.8	9.74
Shaker Heights . . .	28,222	1	62.02	34.9	13.9	19.7	1.4	78.2	9.12
Barberton . . . . .	27,820	492	34.37	31.5	19.4	16.3	9.8	68.8	29.42
Garfield Heights . .	21,662	21	24.84	41.7	24.1	10.4	2.7	61.9	29.06
Niles . . . . .	16,773	270	23.94	38.9	16.7	1.4	2.9	55.6	11.82
Maple Heights . . .	15,586	29	30.53	25.5	20.6	23.5	2.1	73.8	6.02
South Euclid . . . .	15,432	9	33.14	35.8	16.4	16.8	2.6	79.6	10.01
Campbell . . . . .	12,882	18	25.44	31.8	20.5	7.8	3.7	37.6	14.87
Kent . . . . .	12,418	307	19.04	37.5	23.9	6.0	1.3	64.5	3.70
Bexley . . . . .	12,378	—0—	31.66	29.2	23.2	20.5	1.3	32.2	1.67
Berea . . . . .	12,051	42	35.46	29.5	17.1	24.6	1.5	71.0	13.98
Struthers . . . . .	11,941	7	23.02	39.9	20.7	1.9	3.9	29.9	2.10
University Hghts.	11,566	—0—	34.68	44.3	16.3	16.4	1.4	75.4	10.93
Rocky River . . . .	11,237	23	47.79	34.3	15.7	25.8	1.0	74.2	27.85
Girard . . . . .	10,113	155	25.08	29.6	28.4	10.4	3.8	52.7	5.07
Average for Group		101	34.81	34.3	15.6	18.8	3.2	68.1	14.25

<sup>1</sup>Excludes public utility expenditures and expenditures for municipally operated hospitals.

<sup>2</sup>Includes expenditures for Board of Health Administration, treatment and prevention of disease, regulations and inspections, poor and outdoor relief, workhouse, detention home, etc.

tax revenue. Campbell was the only other suburban city of its size-group to have an income tax.

Each of the suburban cities listed above had

some general bonded indebtedness, the amounts ranging from \$30.84 per \$1,000 property valuation in Norwood to \$1.67 per \$1,000 in Bexley.