

A review by the **Federal Reserve Bank of Chicago**

Business Conditions

1959 April



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THE Trend OF BUSINESS

Business expenditures on new plant and equipment stopped declining in the fall of 1958 and began to edge up. Since then, statistical stethoscopes have been applied hopefully to catch any appreciable quickening in the tempo of these outlays. Now, accumulating evidence suggests that a further strengthening in the capital goods sector is under way.

Sizable gains in capital expenditures usually have been associated with vigorous increases in over-all business activity. For the nation as a whole, a question exists as to whether this relationship is primarily one of cause or effect. In the case of many Midwest centers, however, emphasis on capital goods production places the causative connection between a rise in these outlays and relatively full employment in clear perspective.

Among the types of capital goods which have witnessed the greatest improvement in recent months are railroad equipment, trucks and trailers. These items are easily postponed when activity declines because a smaller volume of goods is being moved and it is possible to scrap unneeded units and defer maintenance. Railroads, particularly, often have a tendency to hold back on replacements and to allow equipment to drop into the "bad order" category.

Orders for new freight cars in the first eleven weeks of 1959 exceeded the volume placed in the entire year 1958. According to *Railway Age*, railroad equipment buy-

ing surpasses the most optimistic forecast of a few months ago. On the basis of sales results so far in 1959, trade sources expect that 1.1 million motor trucks will be sold this year—50 per cent more than in 1958. Orders for other types of equipment such as machine tools and construction machinery also are improving.

The Commerce survey

In mid-March, the Department of Commerce released its first projection of business capital expenditures for the full year 1959. These estimates, based on reports of business firms, call for an increase of 4 per cent over 1958. This rise is appreciable, but there is reason to believe that actual outlays will be larger than the plans formulated at the time of the survey would indicate.

Survey figures can only represent what businessmen were planning at the time the tabulations were made. The timing of the survey is highly important when expectations are firming. In the present environment, new projects are likely to be approved more readily and others are pushed into execution more vigorously. Another factor to be considered is the price trend for capital goods. Prices of many types of machinery and equipment, and of components such as structural steel, had declined sharply under the pressure of the period of intense competition during the 1957-58 recession. This trend has now been reversed.

In the spring of 1955, the economy was in

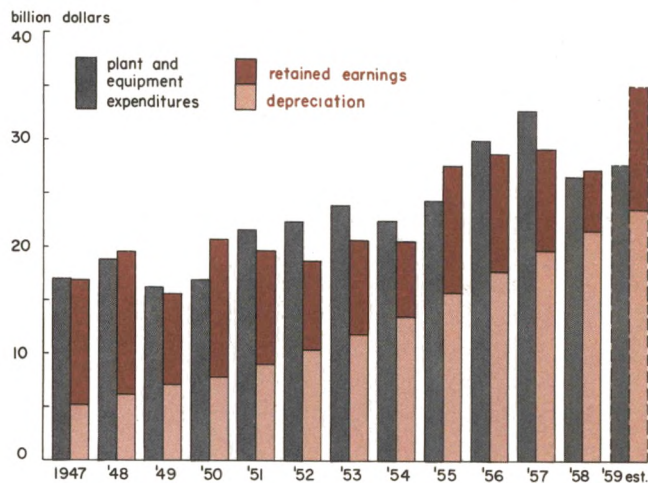
the foothills of a broadly based business recovery. The comparable capital expenditure survey released at that time indicated a rise of only 1 per cent for 1955 over 1954. However, the increase for that year turned out to be 7 per cent, and that gain was only the prelude to a further increase of 22 per cent in 1956.

An upgrading of expectations in recent months can be read in the Commerce data itself. The new figure for the first quarter is 2 per cent higher than had been anticipated three months earlier. Moreover, the annual rate of total capital expenditures, estimated for the second quarter of 1959 at 32 billion dollars, was already equal to the total projected for the entire year 1959. This would imply that these outlays will level or even decline in the second half. But such a development appears highly unlikely in view of the evidence becoming available for particular industries.

It is interesting that the Commerce Department survey calls for an increase of 7 per cent in capital spending by manufacturing enterprises in 1959 over 1958. Both the durable and nondurable goods groups reported increases of this proportion. These data, which probably understate actual trends, shed new light on the problem of "excess capacity" in manufacturing which has been the subject of a good deal of concern during the past year.

The survey shows no appreciable change in the planned spending of public utility, mining and railroad transportation categories during 1959. Public utility totals are dominated by very large projects which require extensive planning. As a result, capital spend-

Funds generated internally by corporations spurting above proposed capital outlays



ing by utilities does not change abruptly. However, the railroad figure in the survey may turn out to be quite low if the *Railway Age* evaluation of the situation is correct. Doubts also are being raised as to the adequacy of the facilities for producing non-ferrous ores, which could lead to a rise in outlays for this purpose.

Profits in new upsurge

Prospective capital outlays are closely related to corporate profit trends. Not only does profitability of existing facilities serve as a guide to the possible success of new projects, but, in addition, higher profits provide part of the funds needed to finance expansion and modernization. To the extent that prospects for corporate earnings influence capital goods spending, the outlook appears very bright indeed.

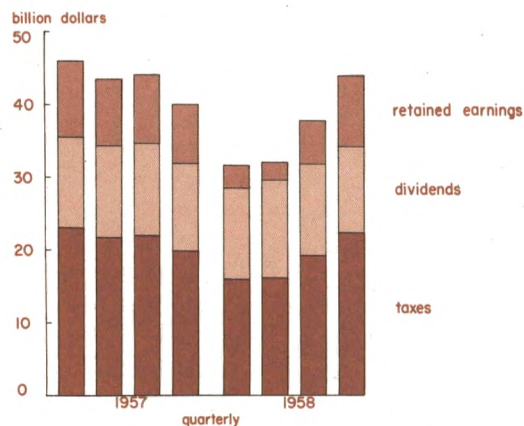
During the recent recession, corporate profits after taxes declined from an annual rate of 22 billion dollars in the third quarter

of 1957 to less than 16 billion at the low point in the first quarter of 1958. After business activity began to rise in the late spring, the increase in profits was very rapid. By the fourth quarter of 1958, the profit rate may have been back to the 22 billion dollar level and was still rising. For the current year as a whole, after-tax profits have been projected by the Treasury at about 24 billion dollars—a new record.

The increase in earnings over the past year has been more rapid than in the recoveries from earlier postwar recessions. Typically the rise and fall in profits is much greater proportionately than the movement in business volume. Special factors have been reinforcing this tendency in the past year. In fact, there have been numerous examples in recent months of business firms reporting higher profits as compared with a year earlier with the same, or even a reduced, volume of sales.

In part, the profit surge can be accounted for by the very large capital expenditures made by business firms during the 1955-58

Retained earnings rose sharply during 1958



period. New facilities operate at maximum efficiency only after the passage of time, a fact which is demonstrated most emphatically in the propitious atmosphere of a recovery period. In addition, work forces in many firms are smaller than a year ago but more carefully selected and better trained. Highly competitive markets and pressure on profit margins during 1957 and 1958 caused many firms to push stringent, cost-cutting drives against unnecessary expenses of all types. In many cases, these economy programs have produced excellent results. It turned out that "breakeven points," the level of operations necessary to show a profit, could be moved downward. In short, the rise in profit margins is closely related to the developments of the past year which have produced very large increases in calculated productivity—output per man-hour.

Profits and depreciation

Business demand for funds from the banks and the capital markets has been less than vigorous in recent months despite rising investment in fixed assets and working capital. Consideration of the huge volume of funds being generated internally, retained profits and depreciation allowances, helps explain this fact.

Security issues for new capital during the first quarter were at an annual rate of about 8 billion dollars, without allowance for seasonal adjustment. This was only about 60 per cent of the level for the same period in 1957 and 1958. (During this period, bank loans probably declined somewhat.) Nevertheless, many firms have been able to increase outlays without strain. Some have been in a highly liquid position and have absorbed short-term obligations for the purpose of temporary investment.

In the first quarter of 1959, corporate

earnings retained in the business after providing for taxes and dividends are estimated at an annual rate of 10 to 11 billion dollars. This compares with a figure of only 3 billion dollars a year earlier. Meanwhile, depreciation and depletion allowances have moved up by about 2 billion dollars as in other recent years. Currently, depreciation and depletion are running at an annual rate of about 22 billion dollars. In the first quarter, this figure was appreciably larger than the volume of funds available from security issues and undistributed profits combined.

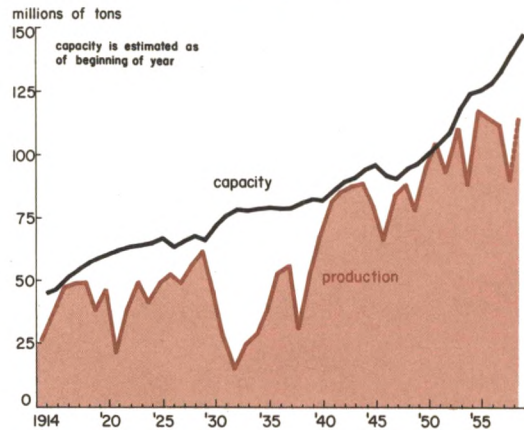
During 1959, retained earnings and depreciation together may exceed 35 billion dollars. Funds available from these sources could then be larger than total expenditures on capital goods and inventories combined, although there is the possibility that such outlays will increase much faster than is now expected.

Steel inventories zoom

In March, steel pourings were at a record rate of over 2.6 million tons per week, and the scramble on the part of steel users to protect the level of their operations against a strike was in full swing. Order books of mills throughout the nation are full for the second quarter. Even the lagging items such as structurals and heavy plate are now on allocation.

If total steel output does not reach 100 per cent of capacity soon (almost 2.9 million tons per week), it will be because steel finishing and shipping facilities are not adequate to support such a rate. But the steel "bottle-neck" currently is directly related to the possible work stoppage. Based on past relationships of steel output and activity in steel-using industries, consumption of steel is probably not much over 2.1 million tons per week at the present time, something less than

Steel production in 1959 expected to be well below capacity



75 per cent of capacity. A cutback in production, therefore, seems certain during the third quarter—strike or no strike.

It is believed that production of steel for the year 1959 as a whole will not be affected unless the possible strike would last over four or five weeks. Total output for this year is projected in the neighborhood of 110 to 115 million tons, close to the totals for the peak years 1955, 1956 and 1957.

The great bulk of the members of the Purchasing Agents Association of Chicago are steel users. Of these, 44 per cent report that they contemplate having on hand a 60-day supply on June 30, while 56 per cent intend to build up to 90 days' requirements. Some of these firms had been buying on a "hand-to-mouth" basis several months ago.

There is little evidence so far that holdings of goods containing steel are being increased, a development noted in similar circumstances in the past such as in the spring of 1956. Apparently, users and sellers of items made of steel are counting upon their suppliers to handle the inventory hedge.

Man-hours and electric power consumption as output indicators

C Current changes in industrial activity are closely watched by businessmen as evidence of the direction and vigor of economic developments. At the national level, a widely used measure is the Federal Reserve Board's monthly index of industrial production. This index traces the ups and downs in physical output of United States manufacturing and mining industries over a period of 40 years. Revisions and refinements in the index have made available improved measures of changes in output of individual industries as well as total industrial production. For the most part, however, this index has few regional or area counterparts, mainly because the task of assembling the basic data and combining them into meaningful aggregates is formidable.

The ideal measure of output, of course, is that which shows quantities produced in physical terms, e.g., tons of steel and number of TV sets. For a great many industries, products are so diverse, numerous and changeable that numbers of items produced are available, if at all, only in the form of annual totals. For other industries, the number of units produced is not a very satisfactory measure of output over any fairly long period of time because the units change substantially. The "automatic" home washer, for example, is a much more complex machine than its prewar counterpart; and, home dryers are relatively new additions to the nation's industrial output.

These are continuing problems for compilers of any consistent measure of physical

output, national or local. Over the years, the problem of unavailability of information on physical output has been more or less satisfactorily solved in the FRB index of industrial production by the use of related series which reflect changes in output. Among such series are two independent, broad measures of manufacturing activity: industrial consumption of electric power and production worker man-hours. Short-run changes in the number of man-hours and the amount of electric power consumed by manufacturing firms typically parallel changes in manufacturing output. For this reason, measures of labor and power inputs can be used to indicate shifts in physical output, where measurement of the latter is not feasible or practical. Man-hours and electric power consumed are particularly well suited for use as output indicators at the area level since labor and power input data are exclusive of the value added in purchased components made in other areas.

Production-worker man-hours represent the best yardstick now available for gauging labor input in the manufacturing process. The continued progress in substitution of power for human labor, however, makes it desirable to measure power input concur-

A description of the construction of the Detroit man-hours and electric power series is available upon request to the Research Department, Federal Reserve Bank of Chicago.

rently with man-hours. Electric power consumption has become a progressively better indicator of total power input for many industries with the installation of more power-driven tools and the substitution of electricity for other kinds of power. Man-hours and electric power, therefore, provide measures of two important inputs which, within the limitations outlined below, should be indicative of changes in manufacturing production. Such series also provide a basis for showing differences in a given area and the nation in timing and amount of cyclical change.

The Detroit study

In recognition of these facts, the Federal Reserve Bank of Chicago and the Detroit Area Economic Forum embarked upon a project to study production man-hours and industrial electric power consumption as indicators of industrial output in the Detroit metropolitan area. The Forum is a small luncheon group of economists and statisticians representing Detroit retail business, public utilities, manufacturing concerns, banks, construction firms, governmental agencies and universities. The group functions as a clearing house for local business development data.

The cooperation of the Michigan Employment Security Commission, the Detroit Edison Company and the larger self-generators of electric power has made possible the collection and compilation of man-hour and electric power figures for Detroit's manufacturing firms. Monthly figures extending back to January 1950 have been compiled for total manufacturing and for each of six major industry groups which collectively have accounted for about 90 per cent of the "value added" by total manufacturing activity in the area in recent years. Current figures will be published monthly. Man-hours and

sales of electricity to firms with more than one plant and producing goods falling into more than one industry group are assigned to the appropriate groups on a plant-by-plant basis. The same treatment applies to kilowatt-hour production by firms which produce part or all of the electricity they use.

All man-hours and electric power consumption series have been adjusted for changes attributable to seasonal factors. Because the trend in man-hours in some industries has differed significantly from that in electric power consumption, each series has been adjusted for the over-all trend since 1950. Therefore, the series, as shown in the charts, reflect fluctuations which are primarily cyclical in nature.

Both the man-hours and the electric power consumption series have certain overhead components which do not change in proportion to changes in output. Some workers, for example, are engaged in a maintenance type of operation, and the time required for that function is unaffected by short-run variation in output. Similarly, some electric power is consumed by manufacturing firms for air conditioning, lighting and other "nonproduction" uses. No estimate of the relative importance of these factors or their influence on the power series can be made from the information as presently compiled. However, adjustment for seasonal variation minimizes certain important short-run changes in power used for lighting and air conditioning.

The man-hour series

Man-hour data are for production workers who worked or received pay for the week ending nearest the fifteenth of the month. All large manufacturing firms in the Detroit area, and a sample of smaller firms, provide the basic data as compiled by the Michigan

—continued on page 10

Cyclical changes in man-hours and electric power use

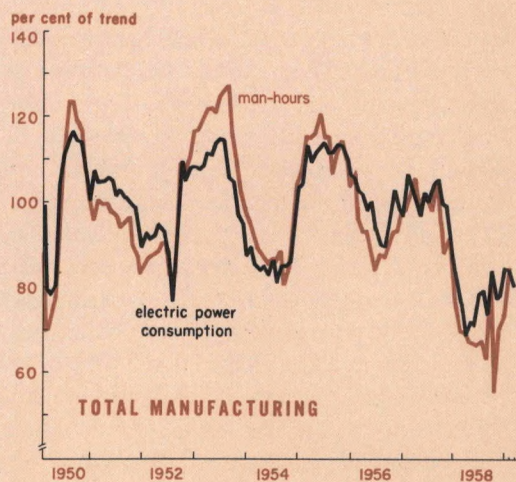
The man-hours and electric power consumption series charted below and on the adjacent page do not appear in their original form but on an adjusted basis. The kinds of adjustment used are dictated by the purpose for which the figures have been assembled, namely to indicate *short-run cyclical* changes in output. Fluctuations of a primarily seasonal nature, therefore, have been smoothed out. Seasonally adjusted figures have then been plotted as a per cent of their respective trend lines shown by the 1950-58 data. The direction and slope of these lines vary considerably among industry groups. In some industry groups, notably transportation equipment and fabricated metals, man-hours and electric power consumption series diverge secularly. Trends in the labor and electric power inputs in the primary metals and machinery industries, on the other hand, are very similar.

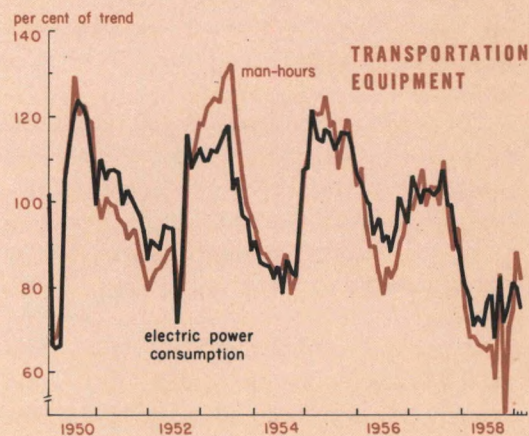
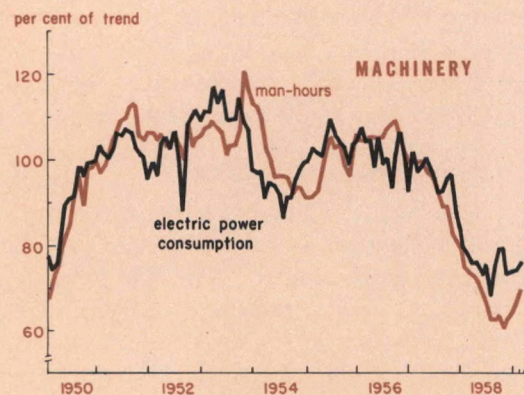
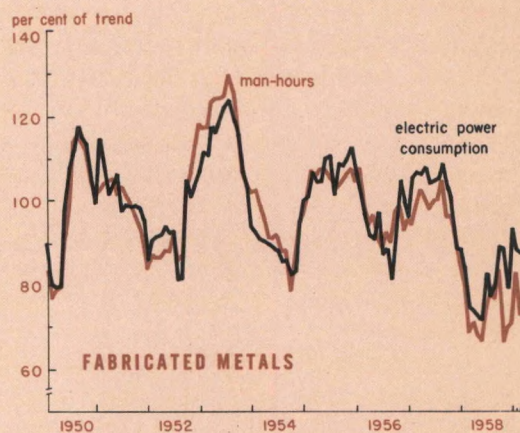
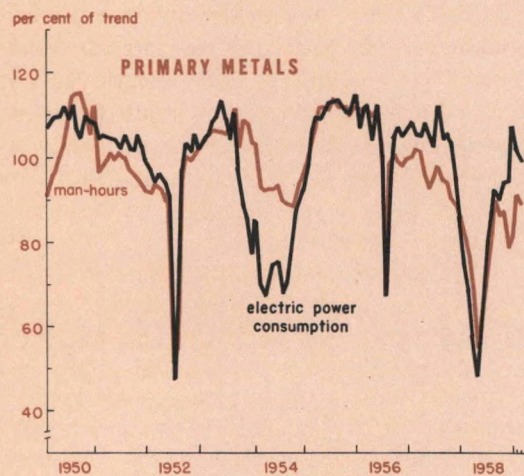
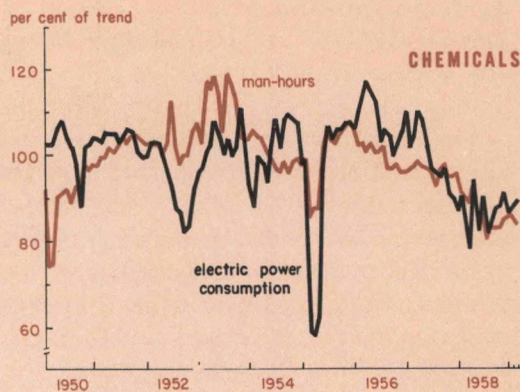
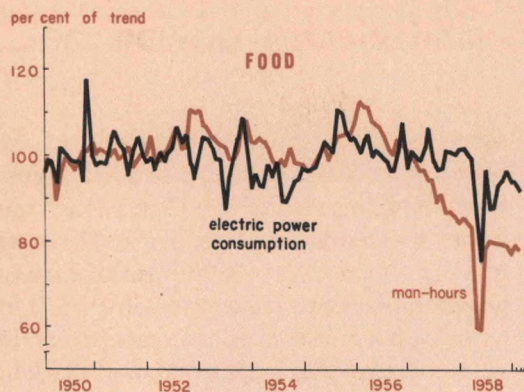
If the principal interest in man-hour and electric power consumption data were simply a record of these particular manufacturing inputs, no trend adjustment would have been made. Or if the longer-term trend in production could be reliably determined from the level of man-hours and power consumption by industry, such an adjustment would have been unnecessary. The actual relationships between inputs and outputs, however, are not as yet established for Detroit manufacturing, so that the input series, at this stage at least, probably contribute dependable information on only short-run changes in production.

The impact of the 1957-58 downturn on Detroit man-hours and electric power consumption in manufacturing has been sharper

than any other cyclical downswing in the period from 1950 to date. For some industries, man-hours were cut back more than power consumption. Moreover, until recent months, the recovery in the use of human power appears to have lagged behind that of electric power, although basic movements in man-hours in the closing months of 1958 are somewhat obscured by the effects of strikes on these midmonth figures.

The severity of the downswing in Detroit manufacturing output as measured by man-hours and electric power consumed has varied markedly among the industries charted. Similarly, the recovery is proceeding at a very uneven pace. For example, primary metals have nearly recouped earlier losses in labor and electric power inputs. The chemical industries, although they showed less of a drop in both the 1953-54 and 1957-58 recessions than any of the metals and metal products industries, have made a less impressive recovery than primary metals.





Man-hours—*continued from page 7*

Employment Security Commission. Wherever necessary, the Commission makes adjustments for holidays so that in effect the figures relate to a full working week. In a few instances, however, midmonth data on hours have been significantly influenced by strikes, adverse weather conditions and other factors which render them unrepresentative of the month as a whole. This limitation is responsible for some differences in short-run changes shown by the man-hour and electric power consumption series.

The power series

The electric power consumption series includes kilowatt-hour sales of electricity to the

largest manufacturing firms serviced by the Detroit Edison Company and the kilowatt-hour production by the most important self-generators of electricity among nonutility firms. The "largest manufacturing firms" are included in the largest industrial customer classification used by the Detroit Edison Company to designate customers qualifying for the primary rate, with eligibility based largely on demand requirements for electric power. About 450 manufacturing companies in the Detroit area are included in this group. Self-generators are represented in the series by those manufacturing firms which produce 1 per cent or more of the area's total consumption of electricity by manufacturing firms.

New techniques in debt management

Over the past few years, the Treasury, in meeting the cash needs of the Government, has experimented with several new ideas in the area of debt financing—experiments which by and large have proven to be successful.

The Treasury's financing job has been particularly difficult over most of the past two years. The brief recession gave the Government a breathing spell in its financing problems, as abundant bank reserves created a brisk demand for Treasury issues.

In both fiscal 1958 and 1959, the Government has run a substantial cash deficit. For the fiscal year ending in June 1958, Federal expenditures topped cash income by 1.5 bil-

lion dollars, and, in the current fiscal year, the Government's cash deficit is estimated at over 13 billion dollars. Thus, the Treasury has not only had to refinance maturing debt and provide for seasonal cash requirements, but by June will have added 14 billion dollars in a two-year period to the volume of U. S. securities in the hands of the public.

The refinancing treadmill

The task of refinancing maturing Government obligations is itself a sizable job. At the end of December 1958, for example, almost 73 billion dollars of Federal debt were to mature in the next twelve months. About 22 billion of that total was held by

the Federal Reserve and Treasury trust funds, leaving more than 50 billion of maturing issues owned by the public.

Another 22 billion of the 50 represents publicly held Treasury bills, which offer little refinancing problem. Each week an issue of bills matures and is redeemed for cash. But at the same time the Treasury puts out a new issue or issues generally of about the same volume, the exact amount being determined by near-term cash requirements. The bills are sold on an auction basis, with the Government accepting the highest prices offered. Hence, the market itself sets the appropriate yield on the securities and readily adapts to the financing.

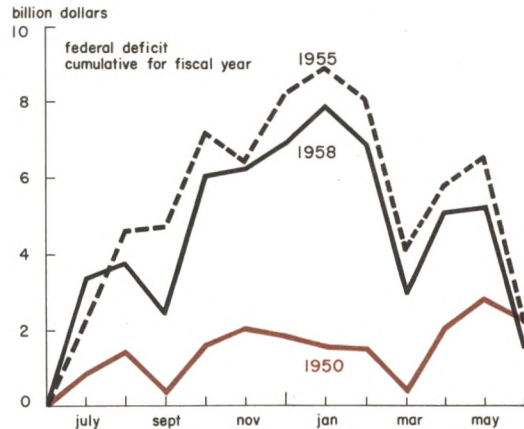
But refinancing the remaining 28 billion dollars is not so simple. At least four separate times during calendar 1959, the Treasury must decide whether to redeem maturing issues for cash and, if not, what type of new security to offer in exchange.

In addition, two tax anticipation issues were outstanding at the start of the year. These obligations, which represent funds borrowed to tide the Government over the seasonal lean period of tax collections, are accepted at par in payment for corporate levies, although they usually mature several days after the taxes are due. When the Treasury receipts over the year equal or exceed annual expenditures, income from taxes in the surplus months is adequate to both pay off the tax anticipation issues and cover near-term outlays.

Seasonal swings moderating

Over the past ten years, the seasonal swings in Treasury receipts were initially accentuated and are now being diminished by changes in statutory timing of corporate income tax payments. Up to 1950, corporations paid their taxes in four equal quarterly

Seasonal swings in Federal deficit sharper during recent years



instalments, based on their previous year's profit. Beginning in 1951, however, under a plan initiated by Representative Wilbur D. Mills, corporate payments were gradually accelerated until, by 1955, the entire annual tax bill was due in the first half of the calendar year—50 per cent on March 15 and 50 per cent on June 15—still based on the previous year's earnings. As a result, virtually all receipts of corporate income taxes—27 per cent of cash receipts in 1955—were concentrated in a short period of the year.

Under the 1954 Revenue Act, the payment of corporate taxes was accelerated even further, this time having the effect of again spreading out corporate tax outlays. Under the new system, corporations have gradually been moving toward the point at which, by 1960, half of the *current* year's estimated liability will be collected in the final months of that year. One-quarter of the annual bill will be due on September 15 and again on December 15 of the year in which the profits are earned, the remaining being paid in March and June of the following year.

The effects of these shifts in corporate payments are evident from the accompanying chart. The seasonal swings in fiscal 1950 were small compared with 1955, by which time adjustments under the Mills plan had been completed. The amplitude was somewhat dampened by 1958 but still approximated 6 billion dollars. During the current fiscal year, corporations paid 40 per cent of their 1958 liability last September and December, the remaining 60 per cent being due this March and June.

The Treasury, since the fall of 1951, has frequently utilized tax anticipation issues to meet the problems involved in providing its seasonal cash needs. These securities are specifically designed to appeal to businesses wanting to invest accrued tax reserves. As indicated earlier, they are issued to mature around the due dates for corporate taxes. The Treasury thus smooths out its cash inflow by borrowing in advance prospective tax receipts.

New techniques—investor's choice

During the last few years, the Treasury has employed some new debt management ideas to ease its financing problems.

For some time, issues of intermediate- and long-term U. S. bonds contained a provision whereby the Treasury could redeem the securities before maturity. Usually this call privilege started three to five years before the final date of maturity.

The last such optional-call obligations offered were the 3¼'s of 1978-83 issued in May 1953. These securities mature in 1983 but may be called by the Treasury any time after 1978.

In July 1957, the Treasury again attached a "call" provision to a new issue, but callable or redeemable at the option of the investor. With interest rates rising at that

time, the Treasury was faced with a good deal of investor hesitancy about committing funds beyond a few years. As a result, the Treasury offered a security that would have a double appeal to investors. The issue could either be redeemed at par after two years or, at the investor's discretion, held for a full four years. If at the end of two years interest rates had risen, the investor could be able to redeem the security and reinvest his funds at a higher return. If, on the other hand, interest rates had dropped, the holder could retain the issue, thus getting a greater yield than would be available in the market.

Another such issue was offered two months later, this one having a five-year maturity, redeemable by the holder after two-and-a-half years. In both obligations, the investor must give the Treasury three months advance notice that he plans to redeem the security. The first of these issues may be redeemed on August 1, with the deadline for notifying the Treasury being May 1.

Finer tuning

The Treasury has also attempted to attune its offerings more finely to prevailing conditions in the Government security market by breaking through the par barrier. Coupon rates on Government issues, are generally expressed in fractions, with eighths— $\frac{1}{8}$, $\frac{3}{8}$, $\frac{5}{8}$ or $\frac{7}{8}$ —being the smallest segment into which a percentage point is divided. The yield to investors, of course, depends both upon the coupon rate and the price of the issue. In the case of corporates and state and local issues, on which the coupon rate may be divided into twentieths of a percentage point, the return to purchasers is adjusted further by pricing the issue at either a premium above par or discount below par—a premium lowering the return below the coupon rate, a discount boosting it above.

Refinancing in 1959 — 50 billion in public holdings

Maturity date in 1959	Type of security	Amount outstanding, Dec. 31, 1958 ¹		Disposition of maturing issues
		Held by public (billion dollars)	Held by Federal Reserve & Treasury	
Weekly	3-month bills 6-month bills ²	21.8	2.3	Refunded for cash, with new issues offered for sale week- ly on auction basis
February 15	2½ % certificate	4.1	5.7	11.4 billion exchanged into 3¾ % certificate maturing in February 1960
	1⅞ % note	5.0	0.1	1.4 billion exchanged into 4 % note maturing in February 1962
				2.1 billion redeemed for cash
March 24	Tax anticipation certificate	3.6	—	
April 1	1½ % note	0.1	—	
May 15	Special bills issue	2.7	*	
	1¼ % certificate	1.7	0.1	
June 22	Tax anticipation bill	3.0	—	
August 1	1⅝ % certificate	5.2	8.3	
October 1	1½ % note	0.1	—	
November 15	3⅞ % certificate	2.6	5.1	
	3½ % note	0.5	0.7	
		<u>50.4</u>	<u>22.3</u>	

¹Excludes 5.3 billion in 2¼ % bonds maturing in 1962 but callable from June 1959, and 3.5 billion in 2¼ % bonds also maturing in 1962 but callable from December 1959.

²6-month regular series bills begin to mature on June 11, 1959.

*Less than 50 million dollars.

Governments, however, had generally been sold at par, with the result that there were gaps of an eighth or .125 of a percentage point in the possible yield offered on new issues. But, since June 1958, the Treasury has priced some new issues at a premium or discount in order to reflect more closely market conditions. Thus far, one security has been placed at a premium and four issues at a discount. The most recent was a bond

issued in February of this year and maturing in 1980. With a 4 per cent coupon rate and priced at \$99 per \$100 of par value, the return to the investor was 4.07 per cent per year over the life of the obligation.

The 4 per cent issue of 1980 also bore another unusual feature—the provision for instalment payments by savings-type investors. In this way, the Treasury attempted to broaden the appeal to such buyers, permit-

ting payment from their new cash flows over a three-month period. One-fourth of the amount due was paid upon issuance of the security, with an additional 25 per cent payable in each of the next three months. Of the 835 million issued to the public, about 500 million was allotted to savings-type investors.

Market churning

Treasury financing operations may affect activity in the Government security market over a period of several weeks. For a week or two before a proposed exchange or cash financing, the market is continuously subject to conjecture concerning the terms of the new offering. Rumors—some of which may eventually be borne out, others of which will not—quickly spread among dealers and investors in Governments and may have a potent influence on market conditions. Then, the market may continue in a state of flux for another week after the announcement as it awaits the results of the offering.

Because of this, the Treasury has been attempting to space its debt so that financing operations will not coincide with other regular periods in which the money market is already subject to considerable churning. For example, tax payment dates—mid-March, June, September and December for corporate levies and April 15 for individual income taxes—always involve a good deal of shifting of funds among banks as taxpayers prepare to remit their taxes. Periods in which dividend payments or corporate statement dates are concentrated also are characterized by a money market in flux.

In order to avoid accentuating the regular market influences, the Treasury has adopted a program of scheduling the maturity of its securities in the months of February, May, August and November. As a result, at the end of 1958, 64 per cent of marketable debt

other than regular bills and tax anticipation issues had maturity dates in one of the mid-quarter months, compared with 44 per cent just two years earlier.

In addition, last month the Treasury announced its intention of establishing a pattern of four one-year auction issues, to mature in January, April, July and October. As a first step toward this goal, the Government has just floated a nine-and-a-half-month bill to come due next January 15. That issue of 2 billion dollars is then expected to be replaced with a one-year obligation.

This plan is in line with the announced Treasury objective of substituting securities sold on an auction basis for short-term coupon issues. As a part of such a program, the Treasury began issuing last December a regular series of bills with a six-month maturity. Thus far, 400 million dollars of these bills have been issued each week. Should this weekly volume continue throughout the 26-week cycle, over 10 billion of the six-month bills will be outstanding when the first issue matures on June 11.

Selling an issue through auction has several advantages. First, it avoids the advance conjectures and rumors concerning the coupon to be put on a new issue by the Treasury and, at the same time, frees the Treasury from the difficult task of picking that rate which will be high enough to gain market acceptance yet not represent too "sweet" an offering. Moreover, the results of the sale can be announced the morning after bids are received. And, by establishing a regular maturity pattern, the uncertainty concerning the length of a cash issue or refunding offer is eliminated.

The Treasury is naturally concerned with minimizing the disturbing effects on the Government security market of its financing operations. Spreading the maturity of the pub-

lic debt over an increasing span of years tends to decrease the number of annual trips to the market and the size of each financing operation. As a result, the Treasury is alert to the need for issuing securities that will fall due in years in which the calendar is not already crowded with maturing obligations. As might be expected, this entails maturities in the upper end of the intermediate-term-or-longer area. The maturity schedule tends to thin out past 1965. In fact, 137 billion dollars of the 175 billion in marketable public debt outstanding at the start of the year mature by the end of 1965, with an additional 30 billion maturing by 1972. Therefore, any progress that the Treasury makes in placing issues maturing beyond 1965 and particularly after 1972 will improve the spacing of the public debt and lessen the financing problem of Secretaries of the Treasury.

Canada restructuring

Canada in mid-1958 undertook a massive refinancing job aimed at improving the spacing of its outstanding public debt. About 6½ billion dollars in Victory bonds, close to half of total marketable obligations, were scheduled to mature by 1966. Of that, 4.7 billion were to come due in the five years from 1959 through 1963. Conjectures were already beginning to circulate concerning the terms to be offered on the Victory bond issue maturing at the start of 1959.

In order to relieve the near-term maturity schedule, the Canadian Ministry of Finance offered to convert outstanding Victory issues into one of four noncallable securities, having maturities ranging from 3¼ to 25 years. The terms of the conversion were designed to encourage holders to exchange in the longer of the four bonds offered.

While some new problems were created for the Canadian monetary authorities by the

conversion, from the point of view of spreading out the maturity of the Canadian public debt the refinancing appears to have been successful. Of the 6.4 billion in Victory bonds outstanding in July 1958, 5.8 billion were converted into the new issues. Over one-third of those converted were exchanged into the 25-year security and an additional fourth into a 14-year issue. At mid-1958, 8.1 billion of the 13 billion dollars of outstanding marketable public debt matured in the period through 1963. By the end of the year, that amount had been reduced to 5.8 billion.

Whether such a program would be desirable for the United States is a question. Conditions in the U.S. and Canada differ widely. The size and structure of the money and capital markets in the two countries vary considerably. Moreover, a few financial institutions play a much more important role in financial activity in Canada than in the U.S. This is particularly true of banking—Canada having 10 commercial banks compared with 14,000 in this country. The Canadian experience does merit attention, however, since it has been one of the very few efforts in recent years by a major nation to radically overhaul its public debt structure without resort to repudiation, devaluation, or compulsion.

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Corn, corn and more corn

Corn piled as "high as an elephant's eye"—this may well be the situation in 1959. Current estimates indicate a record carryover of 1,800 million bushels of corn at the beginning of harvest of the 1959 crop, up 23 per cent from the year-earlier figure. And, as to the current year's crop, farmers intend to plant 12 per cent more acres to corn than they planted last year. The total of 83.9 million acres would be the largest since 1949. In Iowa, corn acreage would set a record, while in Illinois and Indiana the indicated acreage would be the largest in more than 35 years.

To make room for additional corn, many farmers will cut back acreages of soybeans, tame hay, oats and other feed grains. This shift, which accounts for about half the in-

dedicated increase in corn acreage, has come in response to several factors, including changes in Government price support programs.

Under the new support program voted by corn farmers in a referendum last fall, the support price on the 1959 crop will be \$1.12 a bushel, U.S. average, compared with \$1.06 for most corn produced last year. The new program also removes acreage controls and those farmers who observed acreage allotments in 1958 will likely plant more corn. While this last group received \$1.36 a bushel support last year, lower supports on soybeans, oats and other feed grains still leave corn their highest income crop. Some farmers state that they will plant corn "fence to fence," a practice that is quite unusual in the Midwest.

A second important reason for greater corn acreage is the termination of the *acreage reserve* program of the soil bank. In 1958, this program kept 6.7 million acres of corn land idle. While a modest amount of this land in the Corn Belt has been placed in the *conservation reserve* of the soil bank,

most of it is going to be planted and presumably to corn.

If yield per acre in 1959 should equal the average of the last five years, total corn production would approximate 3.7 billion bushels, second only to the record 3.8 billion bushels last year. However, if allowance is made for the upward trend in yields, 1959 could well be the first 4 billion bushel year.

U. S. corn acreage expands as support prices drop on other feed grains

Acreage planted	Corn	Soybeans	Oats	Sorghum
	(million acres)			
1958	74.7	24.9	38.4	21.2
1959 ¹	83.9	23.2	36.0	20.4
Change	+9.2	-1.7	-2.4	-.8
Support price	(dollars per bu.)			
	Corn	Soybeans	Oats	Sorghum
1958	1.06 ²	2.09	.61	1.02
1959	1.12	1.85	.50	.85

¹Intentions on March 1, 1959.

²Noncompliance corn support. For corn grown in compliance with acreage allotments \$1.36 was the support price but applied to only 12 per cent of total production.