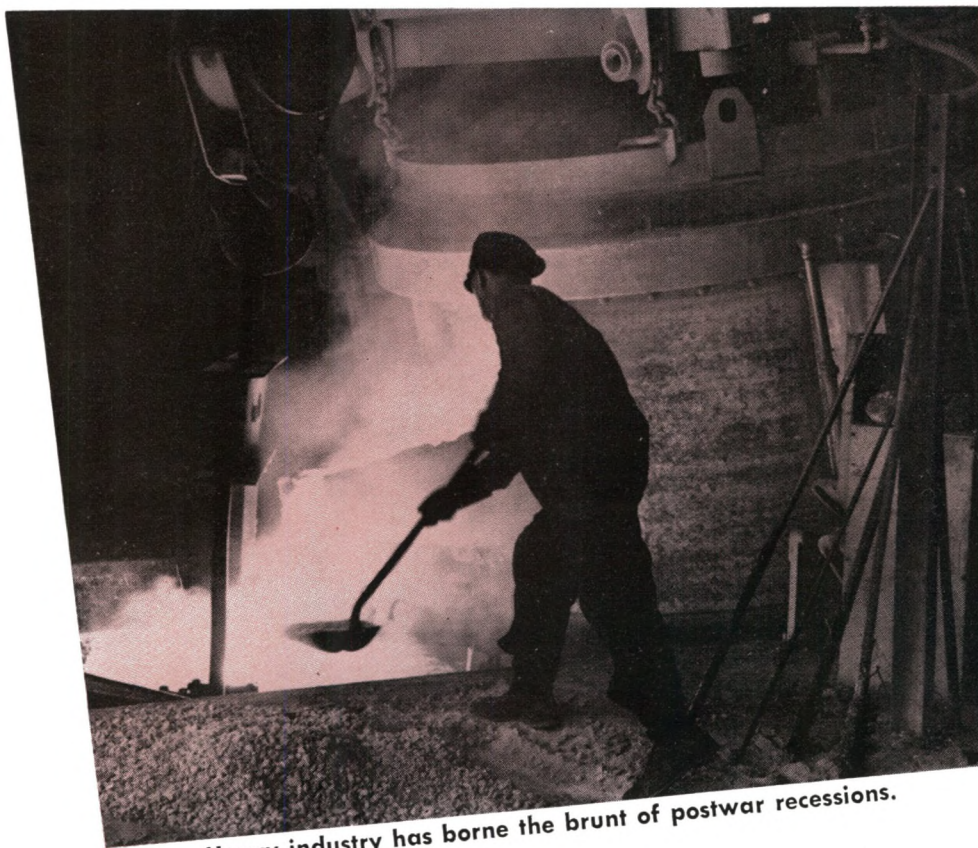


MONTHLY REVIEW



Heavy industry has borne the brunt of postwar recessions.

FEDERAL RESERVE BANK OF RICHMOND

AUGUST 1958

Recession in Perspective

The recession that began last fall showed signs this spring of coming to a halt. A number of key indicators broke the succession of month-to-month declines and leveled off or showed gains.

All recessions are serious, serious in the sense that they bring worry and hardship to many Americans whose incomes and prospects are adversely affected. By the standard of earlier downturns, however, the recent eight months of decline were moderate indeed. As in the other two post-war recessions, the economy showed a striking resilience in absorbing the shocks of production and employment cutbacks in its basic industries.

These three recessions have shown marked similarities in the changes that occurred in overall measures of economic activity. The similarities have been of particular interest because of the equally marked differences in the nature of the recessions. Each decline—and the cycle of which it was a part—was an individual segment of history, with its own causes, its own course, and its own consequences. Yet the summary records of the three have many of the same characteristics.

DIVERSE CAUSES The recession starting in 1957 followed a 34-month expansion that leaned heavily upon business capital spending as a sustaining force. A topping-out of new plant and equipment outlays came in the first half of 1957, residential housing showed continuing weakness, and consumers displayed a marked lack of enthusiasm for new automobiles and other durable goods. Inventories had been growing for 33 months and had apparently reached a level that made them immediately vulnerable to a drop of optimism; businessmen started reducing their stocks early in the recession and continued to live off the shelf in the months that followed. The quick and large change from inventory accumulation to liquidation accounted for a substantial part of the cutback in production that occurred.

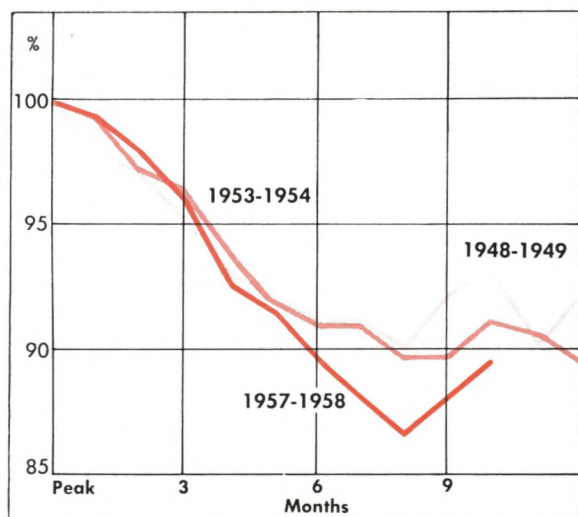
The 1948-49 downturn can scarcely be pegged so neatly, for it grew out of a host of economic aberrations that had accumulated during and following World War II. Its immediate cause was the sudden improvement in the supply of many

goods as new plants began to operate and as the agricultural nations of the world got their fields back into production. Consumers failed to increase their buying in line with the new availability of goods, and both farm and business inventories increased during 1948. The adjustment that followed was largely business-centered, with inventories liquidated throughout 1949 and plant and equipment outlays falling one-fifth from their peak three-month rate. Government spending held firm, as did consumer outlays, and it was the consumer whose increased buying led the economy back up.

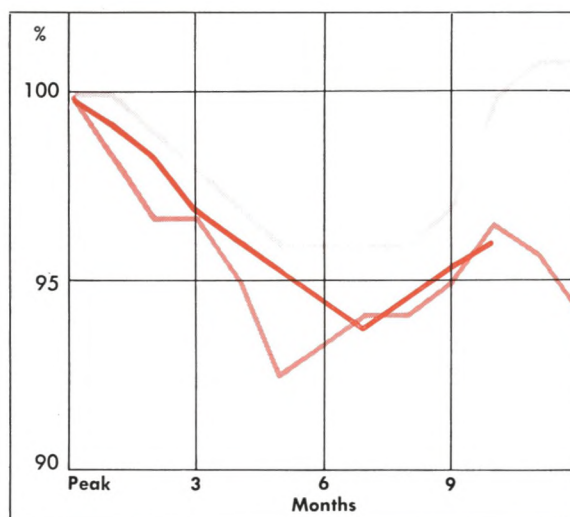
The decline of 1953-54 provided further variety by stemming directly out of decreased Federal expenditures. The end of the fighting in Korea and the Federal Government's economy drive brought cutbacks in 1953 that ultimately led to a \$15 billion drop in Federal purchases of goods and services. The effect was to take the push out of the boom that had developed, and business firms again cut inventories and reduced somewhat their new investment in plants and equipment. Consumers once again kept right on spending, and their total outlays started rising early in 1954. State and local governments continued to expand their outlays, just as in the preceding setback.

The record makes it plain that there has been no typical post-World War II recession.

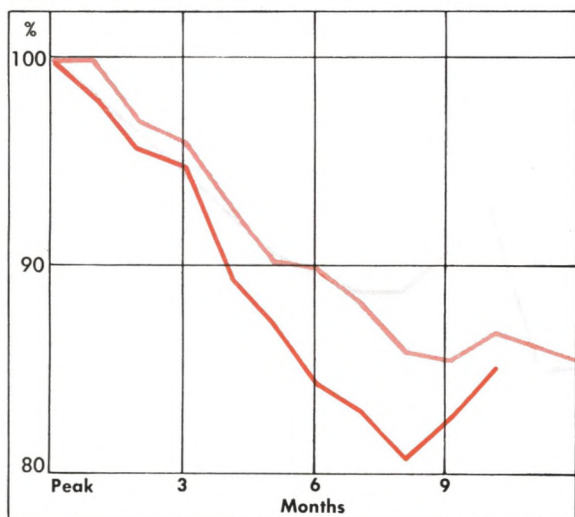
SIMILAR RESULTS The figures on the economic scoreboard—the measures of total activity in the economy—show very modest differences among the three recessions, despite their diverse origins. This becomes particularly apparent when the figures for each recession period are converted to percentages of the peak that preceded the dip and the three percentage series are then compared month by month or quarter by quarter. The charts that follow use this method to point up the common features of the three declines: the monthly figures are shown as percentages of figures for November 1948, July 1953, and August 1957, and quarterly figures are given as percentages of their corresponding peak values.



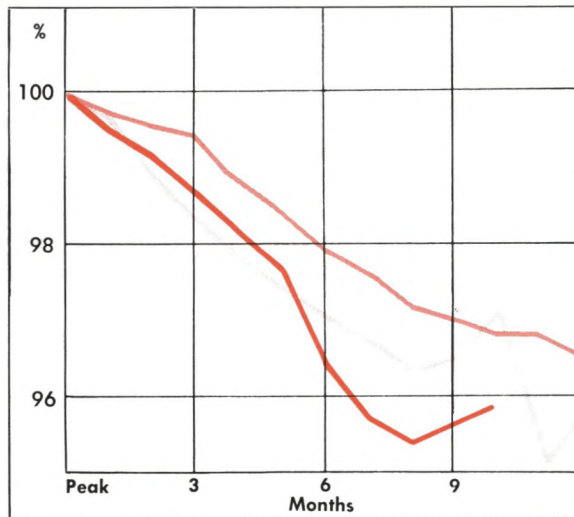
INDUSTRIAL PRODUCTION had by last April shown a greater decline than in either of the earlier recessions—13% as compared with about 10%. Yet the downward movements for the first five months of each can scarcely be distinguished one from another, and the upturn in May and June, the 9th and 10th months, was similar in timing to the earlier experiences and about equaled the 1949 percentage rise.



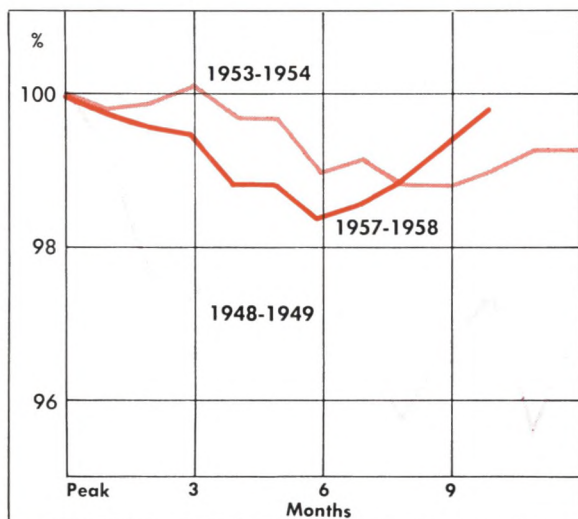
NONDURABLE MANUFACTURING had declined 6% by last March, somewhat less than the rapid drop of 1953 but somewhat more than in 1949. The important food, beverage, and tobacco industries held their own, as they did in the other post-war recessions. Textiles and apparel—under pressure long before the more general recession—dropped by 10%, not so much as in 1953 but more than in 1949.



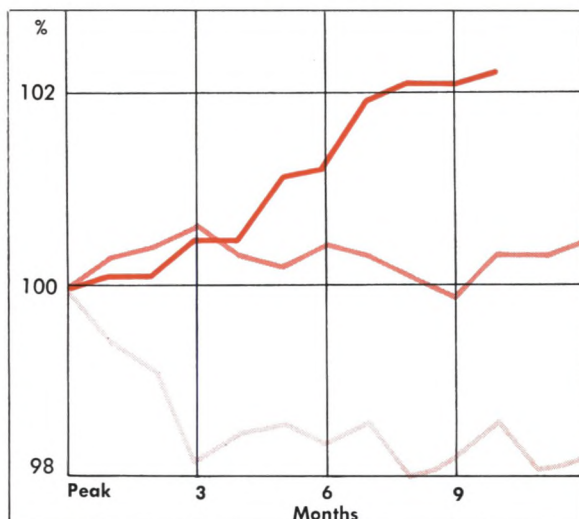
DURABLE MANUFACTURING bore the brunt of the decline in manufacturing in all three recessions, but the nearly 20% drop in 1958 was the greatest. This reflected a reduction of one-third in primary metals output and smaller but substantial cutbacks in all major categories of durable manufacturing. The April-June rise resulted from equally widespread gains as well as a sharp increase in the output of primary metals.



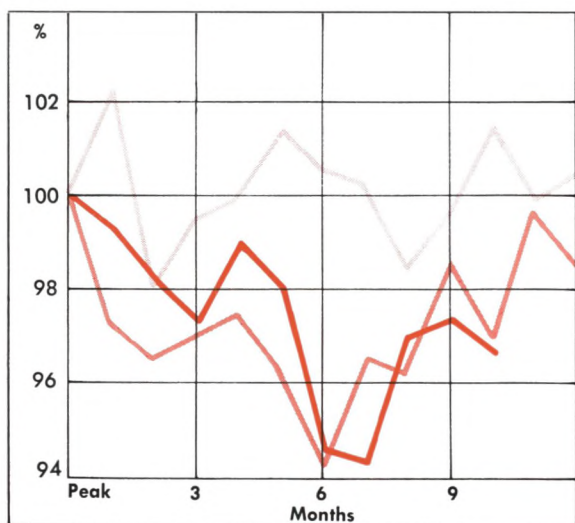
NONAGRICULTURAL EMPLOYMENT was down in April 4.6% from its last August level—somewhat more than the decline of the first eight months of the two preceding recessions. Much of the difference was due to greater cutbacks in durable manufacturing workers, down one-seventh by April. The May-June upturn was comparable in timing to a 1949 increase, while the 1954 improvement was delayed until the 14th month.



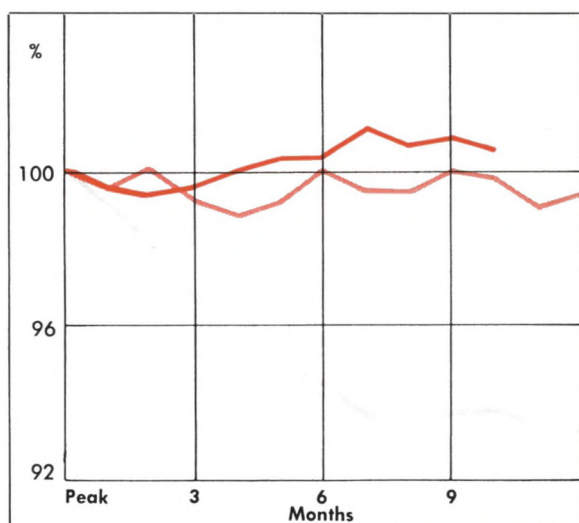
PERSONAL INCOME had until spring followed a course somewhat similar to 1953-54 despite the greater drop in employment in 1957-58. Improving farm income, as well as larger unemployment and old age payments, helped support the total in 1958, and rising wages and salaries contributed to the May and June increases. The rise that began in March came earlier than any sustained improvement in either of the earlier cycles of activity.



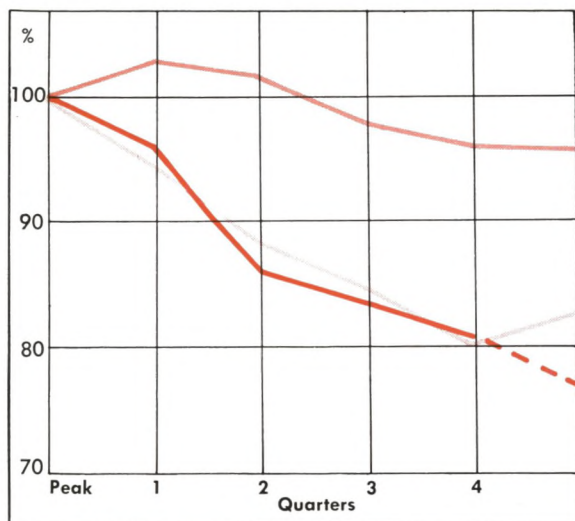
CONSUMER PRICE INDEX shows divergent records of prices. By the 8th month of the 1948-49 drop, the index was down 2%, reflecting widespread price declines. The same period in 1953-54 saw little net change, as a decline in food prices was about offset by rises in housing, medical care, and other services. A 3% increase in food prices since last August led the general increase in consumer prices during recent months.



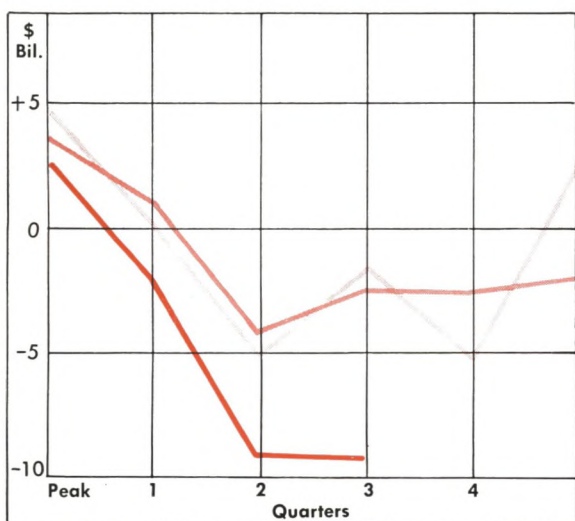
RETAIL SALES in 1957-58 have about duplicated their 1953-54 record, declining nearly 6% in the first six months and then rising irregularly. They did better in 1948-49, when brisk sales of consumer durables kept the total fluctuating about its peak. If autos are excluded, the decline from last August was but 3%—which was recouped by June—and the three records of recession are much more similar.



WHOLESALE PRICE INDEX has followed somewhat the same evolutionary pattern as the retail price index. The middle of 1949 found the index down 6% from the previous peak, with declines appearing in most price groups. Little change was shown in 1953-54, as increases about offset declines. The rise in 1958 reflected increases in farm products and in processed foods, while other prices as a group moved gradually downward.



BUSINESS SPENDING for new plants and equipment in 1957-58 virtually retraced its declining course of 1948-49, although recent projections look to a more prolonged fall from the 1957 peak. Outlays proved more resistant to decline in 1953-54, largely due to gains in the spending of trade, service, finance, and construction firms and limited drops in manufacturing industries, and made a more delayed recovery.



BUSINESS INVENTORY CHANGES—shown in billions of dollars rather than percentages—have been important causes and effects of declining activity. The shift to “living off the shelf” occurred more rapidly in 1957 than in 1948-49 or 1953, and liquidation soon reached a greater rate. It accounted for 59% of the decline in national product from its 1957 peak to the first quarter of 1958 and continued at its same pace.

FEDERAL FISCAL OPERATIONS were important in all three of these postwar recessions. Income taxes were reduced in early 1948, thereby encouraging consumer spending and helping to turn a substantial surplus in the 1948 fiscal year into a \$1.8 billion deficit in fiscal 1949. Again in January 1954 an income tax cut took effect, undoubtedly contributing to the upturn in consumption expenditures that followed. Despite this tax cut, Federal revenues in the fiscal year 1954 were very little below those of 1953, and declining expenditures reduced the budget deficit from \$9.4 billion in 1953 to \$3.1 billion in 1954.

The fiscal year that ended last June 30 brought a deficit of \$2.8 billion, in contrast to the previous year's surplus of \$1.6 billion. The deficit for the current fiscal year is variously estimated at from \$10 billion to \$12 billion. Thus the turnabout in the Federal fiscal balance will provide a substantial expansionary influence this year as compared with fiscal 1957. This change, it may be noted, is occurring without any major tax reduction such as marked the earlier recessionary periods.

ONE MAJOR DIFFERENCE between the 1957-58 downturn and its two immediate predecessors is that the latter are over and done with, while the recent one may not be. The improvements shown in the spring months were impressive, however, for they were widespread and they followed a string of month-to-month declines that were equally widespread. Viewed at first as possibly arising from special circumstances—such as the expected steel price increase—the spring gains received more searching second looks as the improved performance of the durable industries continued. All in all, they have provided the basis for some analysts' conclusion that a recovery is under way.

Even a more conservative, “wait-and-see” observer will admit that the developments of recent months have been consistent with an impending improvement, for the first step to recovery is an end to decline. He might, however, question whether any change is immediately in prospect for the important plant and equipment expenditures, and he would likely point to the heavy inventory liquidations of the spring months, which may have continued in July. Important in the decline, inventory changes are considered equally important to recovery.

The nation will watch the economic scoreboard with particular interest over the next few months as it seeks further perspective on the recession of 1957-58.

**north carolina's
RESEARCH TRIANGLE**

**DUKE
UNIVERSITY,
Durham**

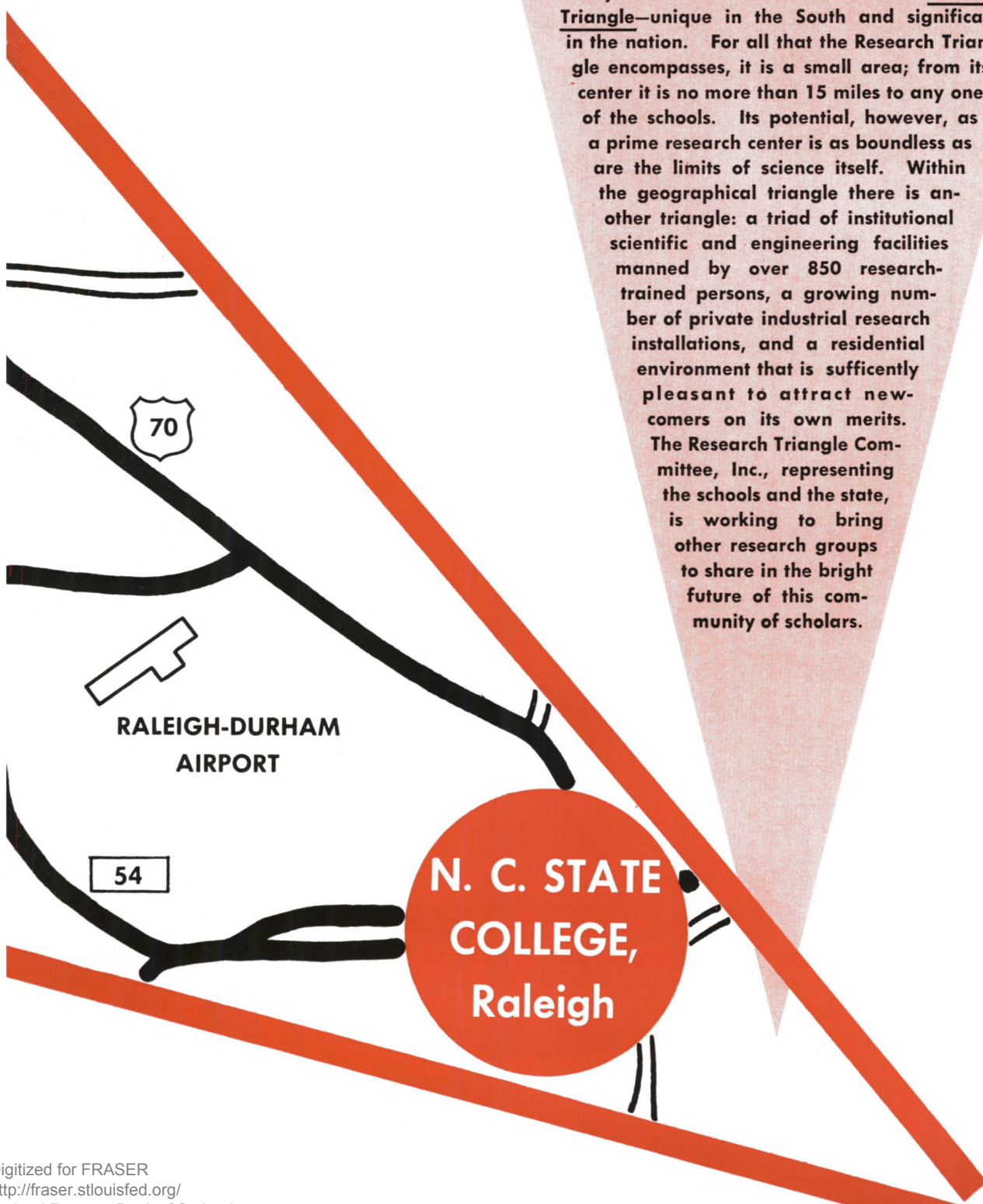
**UNIVERSITY
OF N. C.,
Chapel Hill**

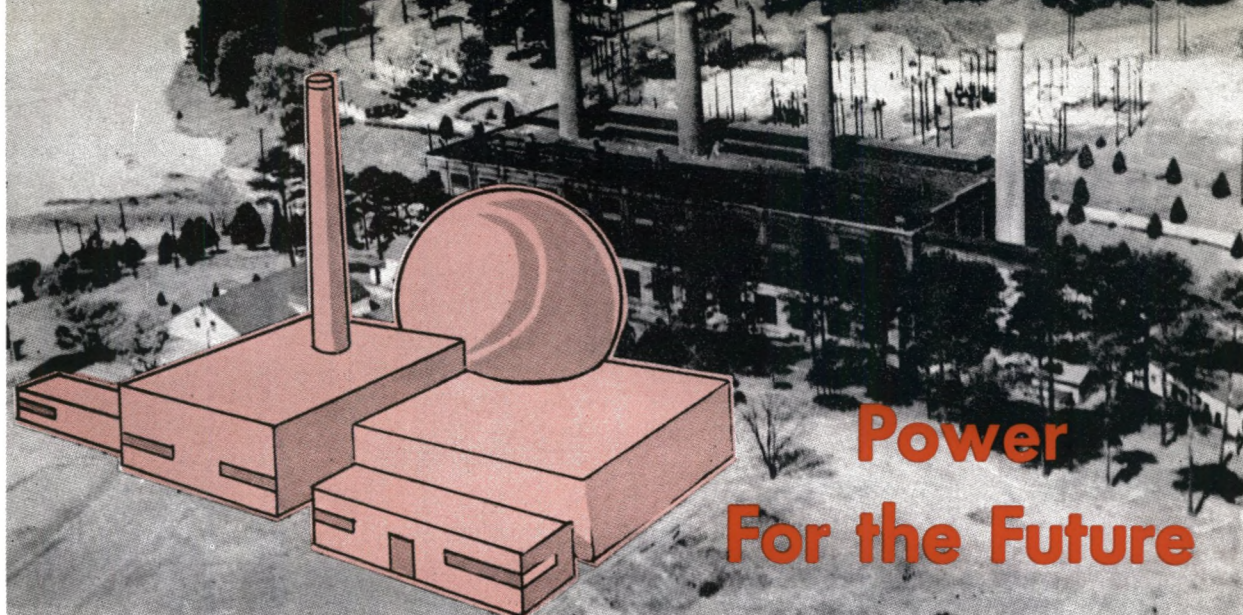
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**Research
Park**

There is a three-sided area in the heart of North Carolina containing in close proximity to one another three of this country's best educational institutions: Duke, North Carolina State College, and the University of North Carolina. This is the Research Triangle—unique in the South and significant in the nation. For all that the Research Triangle encompasses, it is a small area; from its center it is no more than 15 miles to any one of the schools. Its potential, however, as a prime research center is as boundless as are the limits of science itself. Within the geographical triangle there is another triangle: a triad of institutional scientific and engineering facilities manned by over 850 research-trained persons, a growing number of private industrial research installations, and a residential environment that is sufficiently pleasant to attract newcomers on its own merits. The Research Triangle Committee, Inc., representing the schools and the state, is working to bring other research groups to share in the bright future of this community of scholars.





One day in mid-1962 a team of technicians will go through a carefully rehearsed procedure, energy will surge from a nuclear reactor to an electric generator, and thus will commence the first commercial use of the atom as a source of power in the Fifth District. The scene will be the Parr plant of the South Carolina Electric and Gas Company, located on the Broad River some 25 miles northwest of Columbia.

The power delivered will not be great—17,000 kilowatts, or enough for a typical city of 28,000 persons. It will be generated by the existing equipment of South Carolina Electric and Gas Company using steam from the nuclear installation, and it will be distributed through that company's facilities.

Of far more importance than the added capacity will be the look into the future that this project will provide. Research and development underlying the design of the nuclear plant will be subjected to the full-scale test of construction and operation, and the plant will provide the basis for appraising the feasibility of a similar one of larger capacity.

JOINT VENTURE This new plant will be built by the Carolinas Virginia Nuclear Power Associates, Inc. as a part of its program of studying the economic use of nuclear materials for the generation of energy. The corporation was organized in late 1956 by the four principal power companies serving Virginia and the Carolinas: Virginia Electric and Power Company, Carolina Power and Light Company, Duke Power Company, and South Carolina Electric and Gas Company.

This group recently closed a contract with the Atomic Energy Commission as part of the Fed-

eral Government's program of cooperation with private industry in the construction and operation of full-scale reactor power plants to serve as prototypes for future plants. The private companies agreed through their new company to spend \$22.5 million in the design and construction of the plant, as well as \$6.6 million in extra costs of operation due to the experimental nature of the plant. The Government's contribution will total \$14.6 million, covering the cost of nuclear materials and other elements used in the reactor and specified research and development costs after the plant is built.

As the Commission has pointed out, this type of project is a mutually profitable arrangement. It brings private cost-cutting incentives to bear on the construction of power reactors at a stage when costs stand as the chief obstacle to widespread use of nuclear power, and it provides the electric utilities with experience in constructing and operating nuclear power plants.

ELECTRICITY FROM URANIUM The reactor will require careful design and exacting construction, but its principle of operation is simple. Heavy water—water in which the content of "heavy" hydrogen has been increased, thereby changing its properties—will be used to absorb the heat generated by the fission of uranium. The heavy water, flowing through tubes containing the atomic fuel, will be kept under high pressure and thus not turn to steam despite its high temperature. It will go as a liquid into a steam generator where its heat will be used to produce steam from ordinary water, just as does a more orthodox boiler. The steam will go to a turbine to spin the generator that produces electrical power.

Heavy water surrounding the tubes will serve as

a moderator to regulate the rate of fission. Its special properties as a moderator will make it possible to use for fuel natural uranium with an enriched content of U-235, plutonium, and—as the Associates wisely add, “such other fuels as may prove appropriate” in this rapidly changing area of scientific effort.

The reactor's core of fuel tubes will be in a nine-foot round vessel, eleven feet high, housed in a sixty-foot domed vapor container. Its concrete walls will be partly buried in a hillside, with fill dirt banked against the downhill side. The container's walls and earth embankments will provide adequate shielding for the reactor and related equipment. Radiation monitoring devices will keep a close check on inside conditions, providing automatic detection and warning.

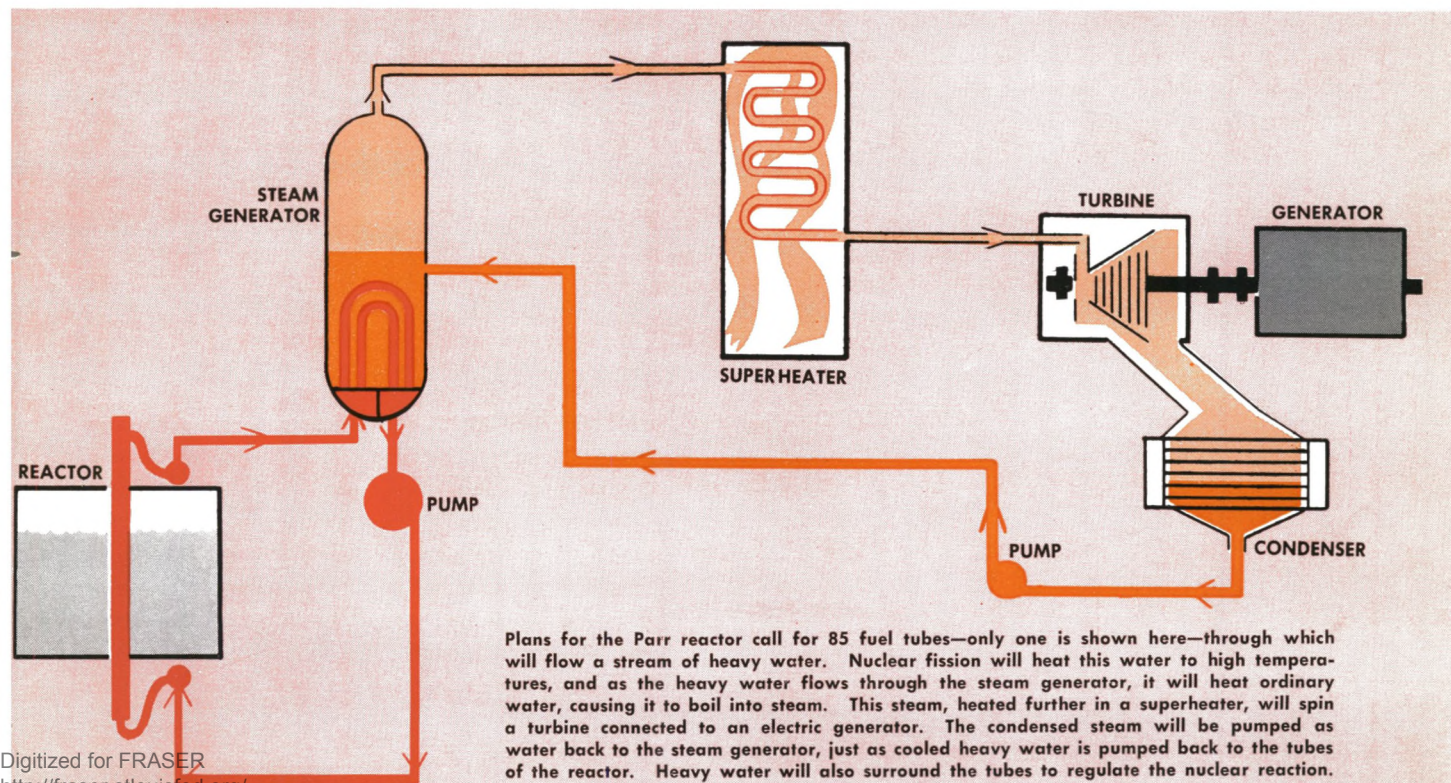
THE LONGER VIEW The Parr project is but one of a dozen industry-government ventures under the Power Demonstration Reactor Program of the Atomic Energy Commission. Electric utility spokesmen state that their industry's outlays of \$60 million this year will be increased by one-half next year, bringing private atomic energy expenditures to a total of \$230 million by the end of 1959.

This is truly investment in the future, for with known techniques and foreseeable fuel costs, non-nuclear methods of power generation have a big cost advantage over nuclear power in this country.

This results both from the higher capital costs per kilowatt of nuclear capacity and from the higher nuclear fuel cost. Efforts are being made to reduce both, however. Experience in nuclear reactor design and operation will provide a basis for less costly plants, and new fuel forms—such as the enriched uranium to be used at Parr—give promise of lower fuel costs per kilowatt hour of output.

Western European countries have pushed ahead to use nuclear power with the know-how presently available, for their power costs average half again more than in the U. S. European coal mining productivity is low—less than two tons a day per man in contrast to more than eight in this country, the best hydroelectric sites are in use, and there is little domestic petroleum and gas. Nuclear power plants are not only feasible but necessary to provide for industrial growth. The British nuclear program calls for 6,000,000 kilowatts of capacity by 1965, and the member countries of the European Coal and Steel Community are presently considering a target of 15,000,000 kilowatts by that date.

This country's efficiency in exploiting its abundant natural resources gives it the advantage of further experimentation with alternative nuclear plant and fuel combinations. Its prototype installations, like Parr, will ultimately produce improved and cheaper methods of harnessing the atom for peace. These will then be used for large-scale power generation in this country.



The Fifth District

Business in the Fifth District reached midyear in an uptrend and in an optimistic mood. The improvement has apparently continued on a broad front. The kingpin of the District's manufacturing structure, the giant textile industry, showed strong signs in July of reviving from its protracted state of depression. Employment registered gains during June almost across the board—manufacturing, construction, trade, finance, and services—and one of the biggest increases occurred in the key durable manufacturing industries. Conversely, insured unemployment moved downward in every state of the District. Outside the cities, farmers had good crop yields in prospect and better livestock receipts in hand.

TEXTILES Perhaps the most significant development of the past month was the surge of buying interest in the cotton gray goods market.

The increasing flickers of renewed buying in the cotton cloth market during June and early July flared into a strong demand at mid-July. Not only was the volume of orders the heaviest in many a month, but it was booked at advancing prices. Interest was centered heavily on the 80-square print cloth that is widely used in apparel lines for men, women, and children.

Buyers apparently acted on the assumption that it might be a final opportunity to beat the rise in cloth prices they felt was in the making. Accordingly, for the first time in about a year there was a willingness to order in substantial volume beyond immediate and close requirements and to cover advance needs. This was a significant market development that enabled mills to take action along long-neglected lines, namely, to raise prices slightly. Despite this increase, however, prices of cotton gray goods are still near postwar lows.

The July developments in the District's cotton textile industry did not go far enough or long enough to indicate whether buyers would be willing to cover all their cloth requirements for the fourth quarter and beyond at substantially higher prices than those they had been paying for immediate and nearby deliveries. The demand side of the market was still somewhat cautious with respect to both volume of orders and prices it would pay. An important factor in the outlook is the low levels of inventories at all stages of distribution and consumption.

HOSIERY Recent reports from centers of the

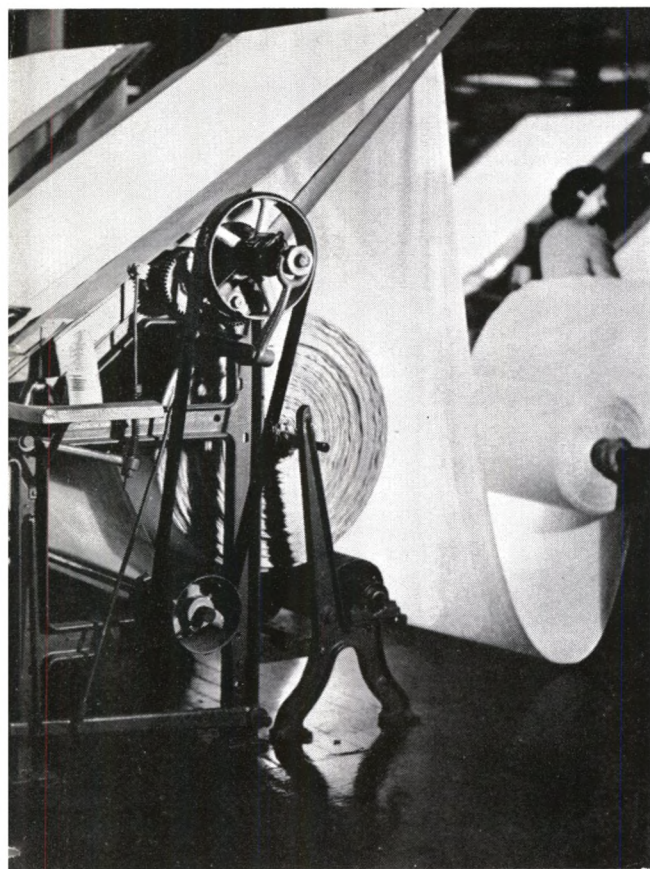
District's hosiery industry indicated a moderate upswing in orders following the July 4th holiday. Women's full-fashioned hosiery was not sharing in this pickup, however, and buyers continued to restrict their orders to cover their immediate and near needs. The improvement in orders and production for seamless and other lines was not strong enough to raise prices, and profit prospects continued unsatisfactory to the producers.

BITUMINOUS COAL mines shut down during the first two weeks of July for the miners' annual vacation and as a result production dropped to a fraction of the preceding month. It was reported that a number of mines in West Virginia had resumed only part-time operations after the vacation period. Average daily production for June in District mines reached this year's highest mark and compared more favorably with the year-ago month than had any previous period of 1958.

Foreign cargo bituminous loadings at the District's leading ports of Baltimore and Hampton Roads have shown slight improvement. Shipments from these ports for domestic ports, however, declined in the four weeks ended July 12th—12% below the preceding month and 28% under the same period last year.

LUMBER There has been a slight improvement in the southern pine market, although prospects continue to appear better than current activity. The volume of orders remains closely tied to current requirements of retail yards, for the latter apparently are averse to increasing their inventories. A factor of paramount importance to District mills is the rise in residential building starts. Tallied at an annual rate of more than a million in the nation for the second consecutive month, the June figure of 1,090,000 was the highest since August 1956. Residential contract awards rose again in June, giving promise of a continuing good level of starts.

EMPLOYMENT June increases in District employment were indeed heartening. With Maryland leading the way with the largest gain, the District added slightly to its nonagricultural employment rolls. More significant than the over-all increase was the swelling of numbers on manufacturing payrolls. For the first time since last September the District's factories increased the number of their employees. Gains ranged from 0.5% in



Cotton textile sales in July give promise of improved operations for District mills during the last half of this year.

North Carolina to 1.6% in West Virginia, and only South Carolina showed no change.

As employment has moved up, unemployment has gone down. Every state in the District registered a decline in its rate of insured unemployment—insured unemployment as a per cent of covered employment—in June. Vacation shutdowns in early July were responsible for increased unemployment during the first two weeks of the month. Maryland, the District of Columbia, and West Virginia are participating in the Federal Government's Temporary Unemployment Compensation plan for lengthening the period of time idle workers may receive unemployment payments.

AGRICULTURE A generally favorable crop outlook for the year seemed assured at midsummer despite the fact that most crops got off to a late start.

A cold and wet spring season delayed planting and made much replanting necessary. Crop developments through June and early July were favorable, however, and excellent yields per acre now seem likely to increase production of most

major crops, even though acreage planted is generally smaller than last year.

July conditions indicated that the biggest improvement among the major crops would be in feed grains, commercial apples and peaches, and hay. Larger crops of Irish potatoes and flue-cured tobacco are also expected.

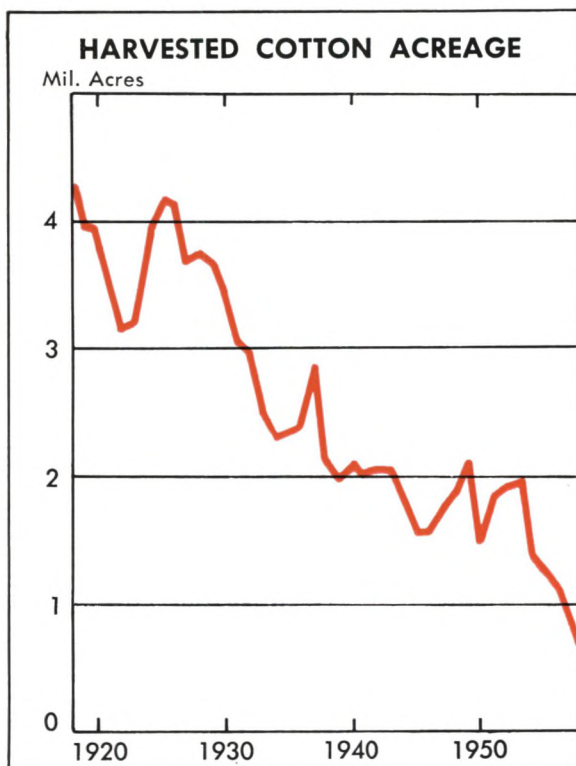
Production of all feed grains other than oats is expected to be considerably larger than in 1957. The corn crop with an anticipated increase of 28% now looks as if it will show the biggest gain over last year of all the major crops. Pastures continue to supply good-to-excellent grazing in most sections, and a hay crop 13% larger than last year is forecast.

Fruit growers are also having a good year on the production front. This spring's strawberry crop was one-eighth larger than in 1957, and production prospects for apples and peaches indicate substantial gains—20% and 18%—over last year.

Harvest of a late spring Irish potato crop about the size of last year's has been completed, and an early summer crop substantially larger than 1957's

A heavy volume of early summer Irish potatoes has been moving to market from the District's eastern counties.





This year's District cotton acreage—down 85% from its 1913 peak—will be the smallest since records began in 1866.

is now moving to market. An increased crop of late summer potatoes is also in prospect. By contrast, reduced acreage and lower yields are combining to bring about a smaller crop of sweet potatoes.

Even though the acreage of practically all types of tobacco has been reduced because of heavier Soil Bank participation, tobacco production is expected to be larger than a year ago. Most of the increase will be in flue-cured tobacco, which has benefited from good growing weather.

Production estimates for three major crops—soybeans, peanuts, and cotton—are not yet available, but crop acreages and growing conditions to date provide good clues. Soybean acreage is up slightly, while the acreage planted to peanuts is essentially unchanged from last year. With 45% of the allotted acres deposited in the Soil Bank, cotton acreage is down sharply—25% under last year and more than 60% below average. Though planted late, these crops have made good progress and generally appear to be in fair to excellent condition.

Livestock production also continues high. District farmers raised the same number of pigs this spring as they did last, and the fall pig crop is

expected to be about 5% larger than last fall's. Production of milk during the first half of the year has been running a shade above last year. Egg production is down slightly, but broiler output continues well ahead of 1957.

Higher farm product prices—particularly for cattle, hogs, chickens, and eggs—have been bright spots in the farm income picture thus far this year. Cash receipts from livestock marketings were up 8% in the first five months of the year. Total receipts fell slightly, however, as crop marketings were down 18%—largely because of unusually high 1957 receipts resulting from the delayed marketing of 1956's late harvest.

BANKING Loan activity at District banks presents a mixed picture of business activity. Business loans—often a good economic indicator—have thus far failed to show as much strength as might have been expected on the basis of other business news. In the five weeks ending July 23, business loans of District weekly reporting banks dropped about 2%—more than they fell in the like periods of either 1956 or 1957.

Consumer loans, however, are showing renewed vigor. In these same five weeks, consumer loans of weekly reporting banks climbed a sharp 1.6%—more than the combined increases during these weeks of 1956 and 1957.

Real estate loans—long the District bright spot—now stand 6% above their level at the beginning of the year. During the five weeks ending July 23, however, increases were moderate when compared with those of the last two years.

CONSTRUCTION CONTRACT AWARDS in the Fifth District reached a 16-month high in June on a seasonally adjusted basis. Awards for residential building and for public works and public utilities showed whopping gains from a year ago.

DEPARTMENT STORE SALES in July are estimated as being up 5% from June, after seasonal adjustment, to a level second only to the record achieved in August of last year.

PHOTO CREDITS

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