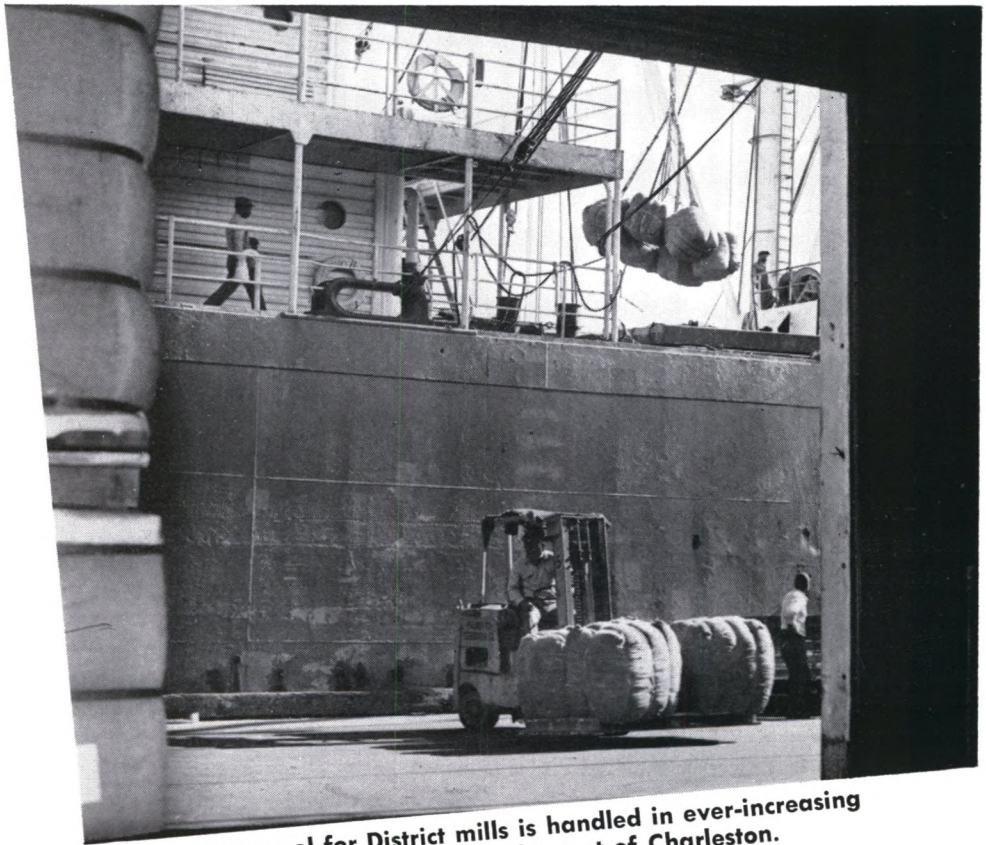


MONTHLY REVIEW



Raw wool for District mills is handled in ever-increasing quantities through the port of Charleston.

FEDERAL RESERVE BANK OF RICHMOND

JULY 1960



Wool manufacturers moving South have taken full advantage of the latest developments in plant layout and modern equipment.

WOOLENS AND WORSTEDS . . .

A New District Industry

A new industry—wool manufacturing—is now moving to the Fifth District. Wool fabrics have been made in Fifth District states since the 1800's, but this is a new industry in the sense of having begun to expand in the South only in the past fifteen years. Although it cannot be called a large-scale migration, there is certainly a southerly movement under way in the wool textile industry. This industry has already reached sizable proportions in the Fifth District which now contains one-fifth of the country's woolen and worsted spindles.

FOLLOWING THE LEAD OF COTTON The typical early southern wool mill was small and made coarse cloth for local use. During the early 1800's a few mills were scattered throughout Maryland, Virginia, and Kentucky, and later in the Carolinas. The southern industry remained strictly local in character throughout the nineteenth century and lagged behind the North, which developed as the important wool manufacturing area of the nation.

During the two decades from 1920 to 1940 there was a pickup in the tempo of wool manufacturing in the South as new plants moved into the area

and experimented with new methods of manufacture. The movement to the South did not really begin in earnest, however, until after World War II. Since then new plants built by manufacturers have been located mainly in the Carolinas, Virginia, and Georgia. Following the pattern set earlier by cotton mills the woolen mills moved into the Piedmont area of these states.

At first the woolen industry in the South consisted primarily of spinning and weaving mills. As the number of these mills grew, the southern wool industry became large enough to support processing plants which prepare wool for spinning. Since much of the wool that is processed, spun, and woven into fabric is imported, the demand of the southern wool mills has caused Charleston, South Carolina, to grow spectacularly in importance as a port of entry for foreign wool.

WOOLEN VS. WORSTED Apparel fabrics made from wool are classified into two broad groupings—woolen and worsted. Woolen fabrics have a heavy, bulky feel and a tendency to sag and not to hold a crease as well as worsteds; woolens give

good wear and are relatively inexpensive. Two familiar woolens are tweed and flannel. In contrast, worsted fabrics have a sheen, do not sag, and hold a crease well. They also are less bulky, give better wear, and are more expensive than woolen fabrics. Some of the better-known worsteds are gabardine, serge, and crepe. In 1959 United States production of woolen fabrics was $2\frac{1}{2}$ times the output of worsteds.

MANUFACTURING HIGHLIGHTS Wool is received at a mill as a fleece, packed in a bag or bale. It is scoured in a long series of vats to remove grease, dirt, and other impurities. After washing operations, a different process is followed depending upon whether a woolen or worsted fabric is to be the end result. A woolen fabric is quite often a blended fabric—that is, it contains not only wool but man-made fibers also. A suit fabric, for example, might be a blend of wool and orlon. In reporting production data, the Census Bureau considers a fabric a woolen if at least 50% of the fiber used is wool. After blending, the wool is carded to straighten out the matted fibers and make them as uniform and parallel as possible. The result of carding is a continuous strand of wool known as roving. This wool is now ready to be spun into woolen yarn.

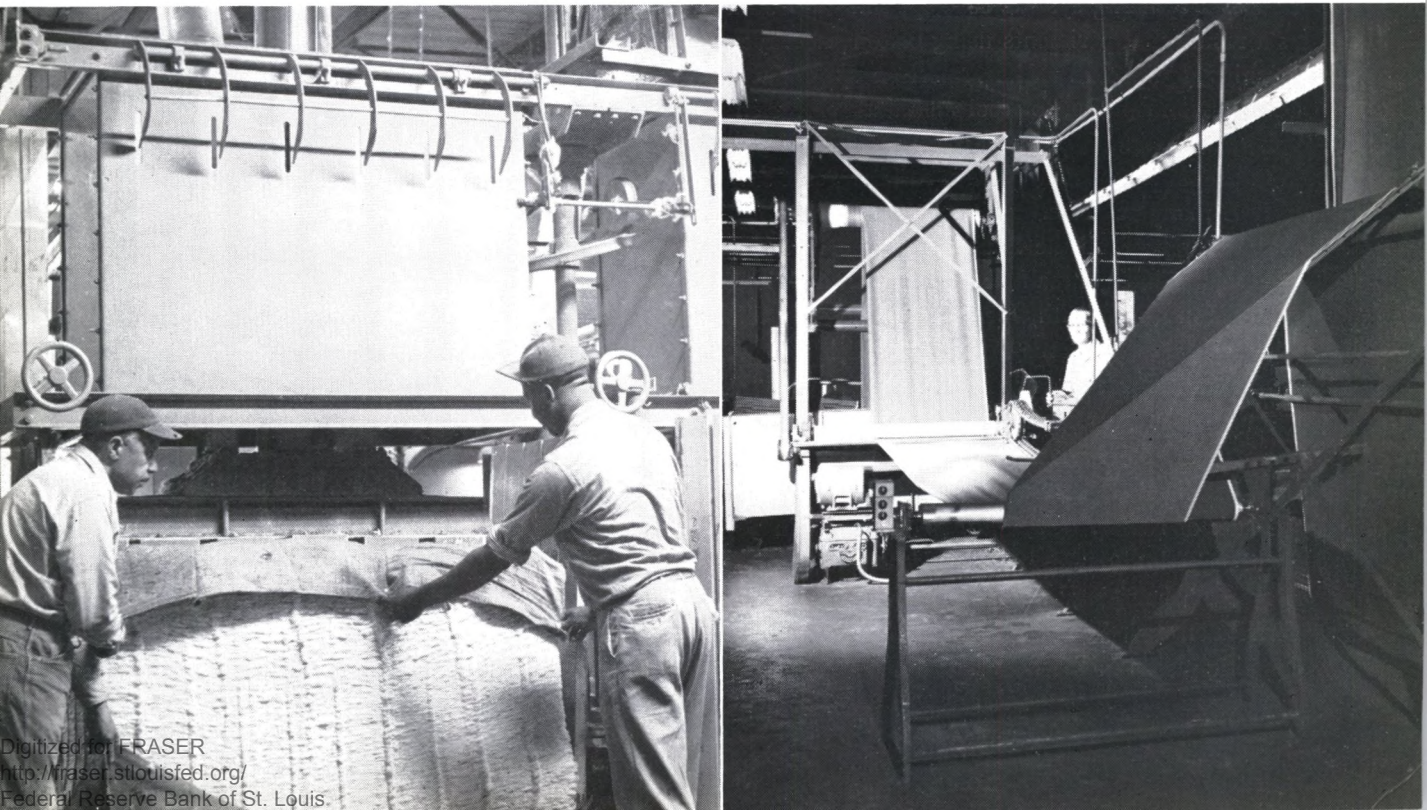
Worsted yarn is made primarily from all wool

with little blending of other fibers. Wool destined for worsted yarn is combed as well as carded. Combing removes short wool fibers and leaves only straight, uniform, long fibers. Combing is very important in producing the special characteristics of worsted fabrics. Wool comes from the comb as wool top, a thick strand which is wound into a large ball. This is then spun into worsted yarn.

FROM YARN TO FABRIC After the fabrics are woven, different finishing operations complete the manufacturing process and further the distinction between woolens and worsteds. Woolen fabrics come from the loom looking dull and loosely woven. When subjected to a process of heat and pressure known as fulling, the cloth shrinks in length and width but gains in body, that is, compactness of texture. The fabric is then brushed to hide the texture of the weave and soften the colors. In contrast, worsted fabrics are sheared close to the fabric, producing a clear surface with the weave and colors very distinct.

Apparel fabrics are the primary use of wool. In 1958 apparel and related end uses accounted for about 70% of all wool consumption in this country. This included garments such as coats, suits, and dresses as well as apparel linings and retail piece goods which find their way into apparel. Wool apparel fabrics differ in uses as well as in

Bales of raw wool are processed, spun, and woven into yards of finished fabric in Fifth District woolen and worsted mills.



outward appearance. Fabrics for men's and boys' wear are about evenly divided between woolens and worsteds with woolens holding a slight edge at the present time. For women's and children's wear, however, woolens are the overwhelming favorite.

NEW PLANTS + NEW MACHINERY As the wool textile industry has moved south, mills have shown a preference for locations in small, rural towns where there is reasonable assurance of an adequate labor supply. The importance of such mills extends well beyond the town limits. In many cases they provide employment to people living as far as thirty miles from the plants.

Another characteristic of the southern movement has been the building of branch plants in the South by companies which formerly had centered their operations in the North. These southern plants have usually been entirely new from top to bottom and have not involved the transfer of equipment from northern mills. This has enabled southern manufacturers to capitalize on improvements in manufacturing technology and plant layout. The ability to produce wool fabrics more economically has been a definite advantage to new southern mills.

NEW SPINNING SYSTEM Of special interest in the story of the southern wool industry is the so-called American system of spinning worsted yarn. This is a spinning system developed in the South as a result of experiments using cotton and rayon spinning equipment. The American system was a major contribution to wool manufacturing technology as it stimulated much-needed improvements in methods and machinery with resulting cost savings to manufacturers.

Another point in the South's favor is that it is a major producing area for man-made fibers which are used in blends with wool. Southern wool mills are close to their source of supply of these fibers. Another southern asset is its growing apparel industry which serves as a ready outlet for wool fabrics from southern mills.

A handicap to southern wool mills had been the lack of readily available raw materials in the South. This situation has been improved to some degree by the rising volume of imports of wool at Charleston and the establishment of scouring and combing plants in the South.

WOOL IN THE DISTRICT Most Fifth District wool mills have been built since 1945, but a few that were established as early as 1880 are still operating. District wool mills as a rule are of moderate size although slightly larger than the United States average. The structure of the industry in the District follows the standard pattern—scouring and combing plants, yarn mills, weaving and finishing mills.

It was stated earlier that processing plants moved to the District because of the growing wool industry. In turn, the establishment of these scouring and combing plants has been important in promoting the continuing growth of the District's wool manufacturing industry. The first of these plants was built in 1954. Before that time mills either had to process the raw wool themselves or buy processed wool from northern mills. To have ready access to scouring and combing operations located relatively near has been a big advantage to District wool mills.

The growth of wool imports has been of tremendous significance to the port of Charleston. In 1954 only 350,000 pounds of wool were unloaded on the Charleston docks. By 1959 the volume of wool imports had swelled to 64 million pounds. These imports come from all over the world—Australia, New Zealand, South America, and South Africa. They have pushed Charleston into third place, after Philadelphia and Boston, as a port of entry for wool. In addition to their importance to the southern wool industry, these imports have played an outstanding part in the growing prominence of Charleston as an Atlantic coast port.

Most of the wool mills in the Fifth District are in North and South Carolina with a few in Virginia. According to the most recently available Census of Manufactures 13,000 persons worked in District wool mills in 1954, an increase of 35% from 1947. Value added by manufacture was \$59 million—up 55% in the same seven year period. This gave the District about 15% of total wool industry employment and value added by manufacture in 1954. Undoubtedly there have been further increases since that time.

A more recent measure of the size of the District's wool industry is a comparison of spindles used in spinning yarn. At the end of 1958 the District had 196,000 worsted spindles—30% of the national total and a 10% gain from 1956. North

Carolina had by far the largest number of worsted spindles in the District—in fact, her total was second in the nation only to Rhode Island, an older wool manufacturing state. South Carolina ranked fourth in the nation in the number of worsted spindles.

Spindles on the woolen system are not as numerous as worsted spindles in the District. There were 85,000 of these spindles in the District at the end of 1958, about 12% of the national total. Woolen spindles have shown a gain of 16% since 1956. North Carolina again was out in front in the District, but South Carolina and Virginia were not far behind.

WOOL IN THE NATION The wool industry in the United States has not kept pace with the general industrial expansion since World War II. While the District wool industry has been growing, the United States industry has been characterized by declining production and liquidation of equipment. This has been a costly and protracted process of adjustment.

This adjustment has been necessary because of a number of factors. One of these has been general overcapacity in the industry and the growing obsolescence of the equipment in wool mills. Replacement of old equipment by new and more efficient machinery has been accompanied by a decline in the number of spindles, looms, and employees in the United States wool textile industry.

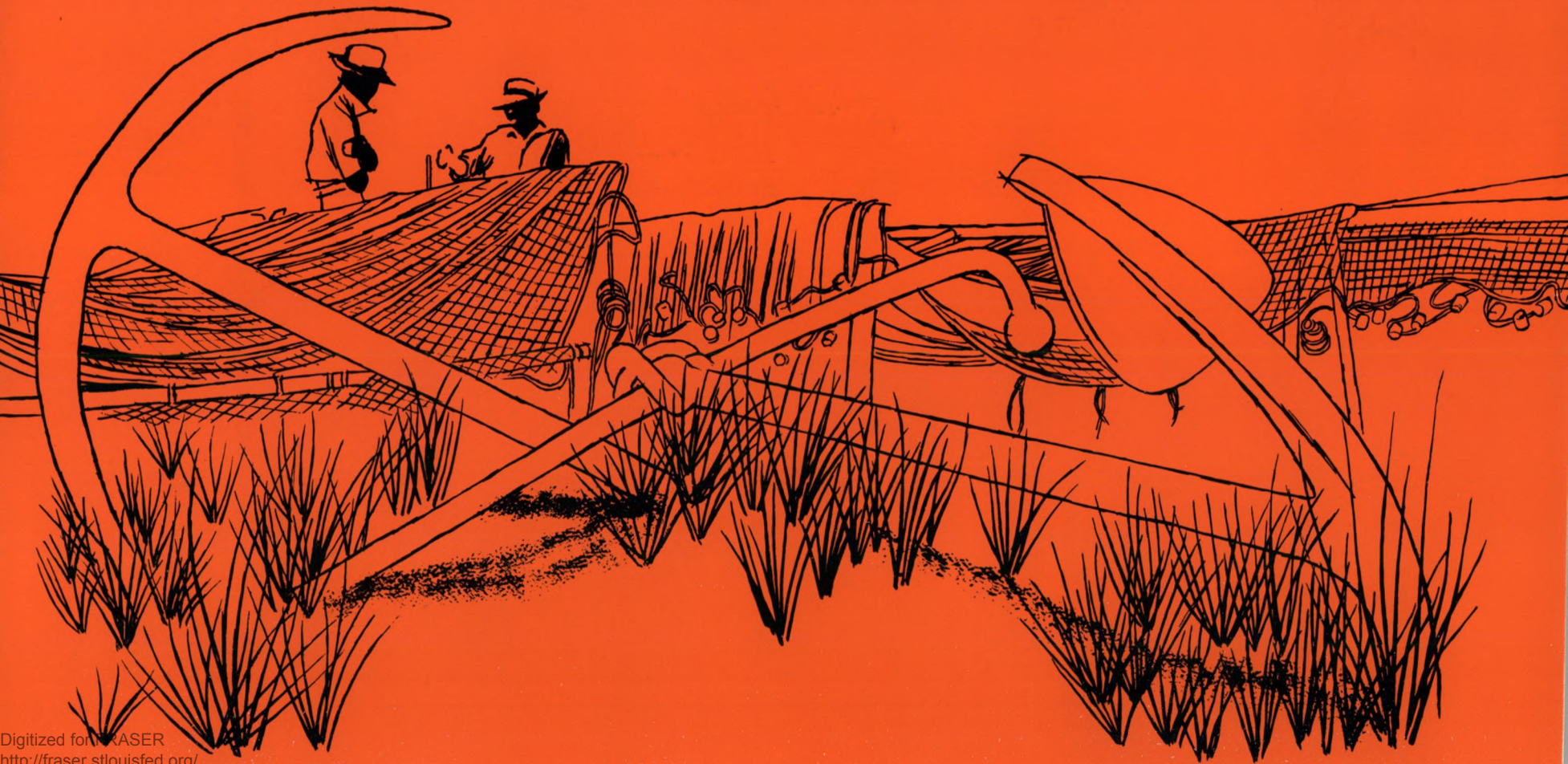
Despite increased efficiency, two other factors have caused the wool industry to lose markets. These are the trend toward lighter, more casual clothing and the competition from man-made fibers. Both of these have resulted in losses to newer fabrics. In response to these trends manufacturers have developed lighter wool fabrics and combined wool and man-made fibers in blended fabrics. Another problem of the wool industry has been competition from a rising volume of imported wool fabrics.

Whether the industry has completed its process of adjustment remains to be seen. The southern movement of wool textiles has been part of this adjustment and has contributed additional strength to the already dominant position of the Fifth District in the nation's gigantic textile industry.



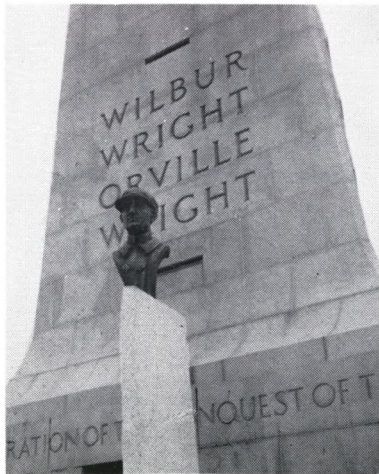
District-made wool fabrics become fashionable apparel.

Monthly Review looks at . . . the Outer Banks





On a sand dune near Kitty Hawk stands the Wright Memorial monument. It commemorates man's first airplane flight, which was made here by the Wright brothers in 1903. The monument is part of a 300-acre National monument which includes restorations of the hangar, shop and living quarters used by the Wright brothers.



Stretching in a thin line for 175 miles along the North Carolina coast lies a string of islands called the "Outer Banks." Only about 5,500 people make the islands their year-round home, but the number of visitors to this once-isolated region has begun to assume impressive proportions. Improved ferry service and new highways have brought the Outer Banks within reach of the motorist. It is estimated that last year over 700,000 people visited the Banks, an increase of over 200,000 in only four years. One of the main attractions is the National Seashore Park established by the Government on Bodie, Hatteras and Ocracoke Islands—over seventy miles of beach, untouched by commercial development.

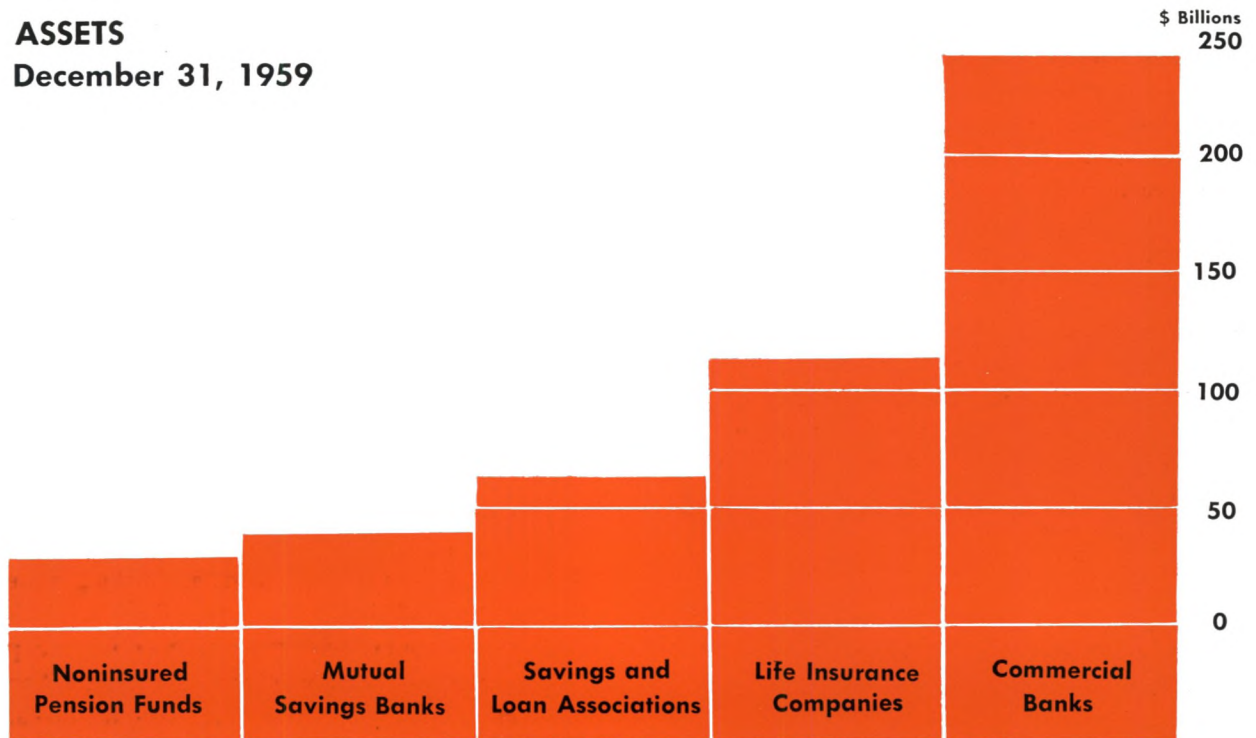


Famous Hatteras lighthouse, tallest in the United States, warns ships away from the dreaded Diamond Shoals, called by mariners "the graveyard of the Atlantic." Here, just off Cape Hatteras, the Gulf Stream meets the Labrador Current; the terrific force with which they clash has caused the wreck of over 2,000 ships in the last 400 years. Ironically, the very danger surrounding these waters made the islands popular with bandits and outlaws during the early 18th century, for pursuit was always difficult and often impossible. The notorious Blackbeard used the Banks as a hideaway, and was killed in a bloody battle off Ocracoke Island in 1718.

The Outer Banks were the site of the first English colonies in America. In the 1580's, during the reign of Queen Elizabeth, three attempts were made to establish settlements on Roanoke Island. All were unsuccessful, and later a permanent settlement was established farther north at Jamestown. Paul Green's famous outdoor drama, "The Lost Colony," given each summer on Roanoke Island, tells the story of one group of settlers who disappeared without a trace, and whose fate is unknown to this day.



ASSETS
December 31, 1959



PENSION FUNDS: A NEW FINANCIAL GIANT

In 1920 assets of noninsured pension funds totaled only \$50 million. Ten years later assets had grown rapidly but still scarcely topped \$0.5 billion. Recently, they passed the \$27.2 billion mark and apparently are headed higher. Collectively, they promise to provide pension benefits for over 15 million people. There's a new giant among non-bank financial institutions.

SOME KEY CHARACTERISTICS Basically, there are two types of private pension funds—insured and noninsured—although a practice called split-funding combines features of both. Noninsured funds—which may be pension funds proper or deferred profit sharing plans—are typically individual financial entities with assets completely separate from those of the parent institution. These are ordinarily “managed” in varying degrees by a committee appointed by the sponsoring organization, but all fiduciary matters such as the safeguarding and investing of funds are placed in the hands of a bank or nonbank trustee. Regular nonprofit-sharing pension funds are “funded” by setting contributions at levels that are actuarially estimated to be adequate, when combined with expected income on such funds, to provide promised benefits. Profit-sharing plans also accumulate

funds for investment beforehand but guarantee no set amount at retirement since company contributions are based on the volume of profits. The relatively informal “unfunded” plans set aside nothing in advance and consequently are not properly considered pension funds.

An insured pension fund is not a separate financial organization in the same sense as a noninsured fund. Instead of investing collections through a trustee to provide retirement benefits, insured pension funds use contributions as premiums to buy retirement benefits in the form of individual or group annuities. The insurance companies invest such premiums jointly with their other income rather than separately as do trustees of noninsured funds. Thus, the assets of insured funds are merely part of the reserves of life insurance companies.

Dollarwise, noninsured private funds' assets of \$27.2 billion at the end of 1959 put them quite a few notches ahead of the insured funds' \$17.5 billion. Corporate funds alone, which held 93% of the \$27.2 billion, dwarfed even the \$20.1 billion Old Age and Survivors' Insurance Trust Fund. Holdings of other large public retirement funds were: state and local government plans, \$17.2 billion; Civil Service Retirement Fund, \$9.5 billion;

and Railroad Retirement Account \$3.7 billion.

THE CASH INFLOW Employer contributions far outweigh employee contributions as a source of new money for noninsured pension funds. Last year, for example, employer contributions provided nearly 65% of total income and employee payments supplied less than 9%. Investment income produced about 23%, and realized capital gains accounted for most of the remainder.

INVESTMENT POLICIES AND PRACTICES Investment policies of noninsured funds differ somewhat from those of most financial institutions for several reasons. First, funds can stay almost fully invested since cash inflow is set to provide adequate funds to meet estimated cash outgo. Second, funds are generally fully exempt from Federal income taxes. Finally, the regular cash inflow and the long run nature of their claims make suitable the "dollar averaging" principle of investing continuously throughout all phases of the business cycle.

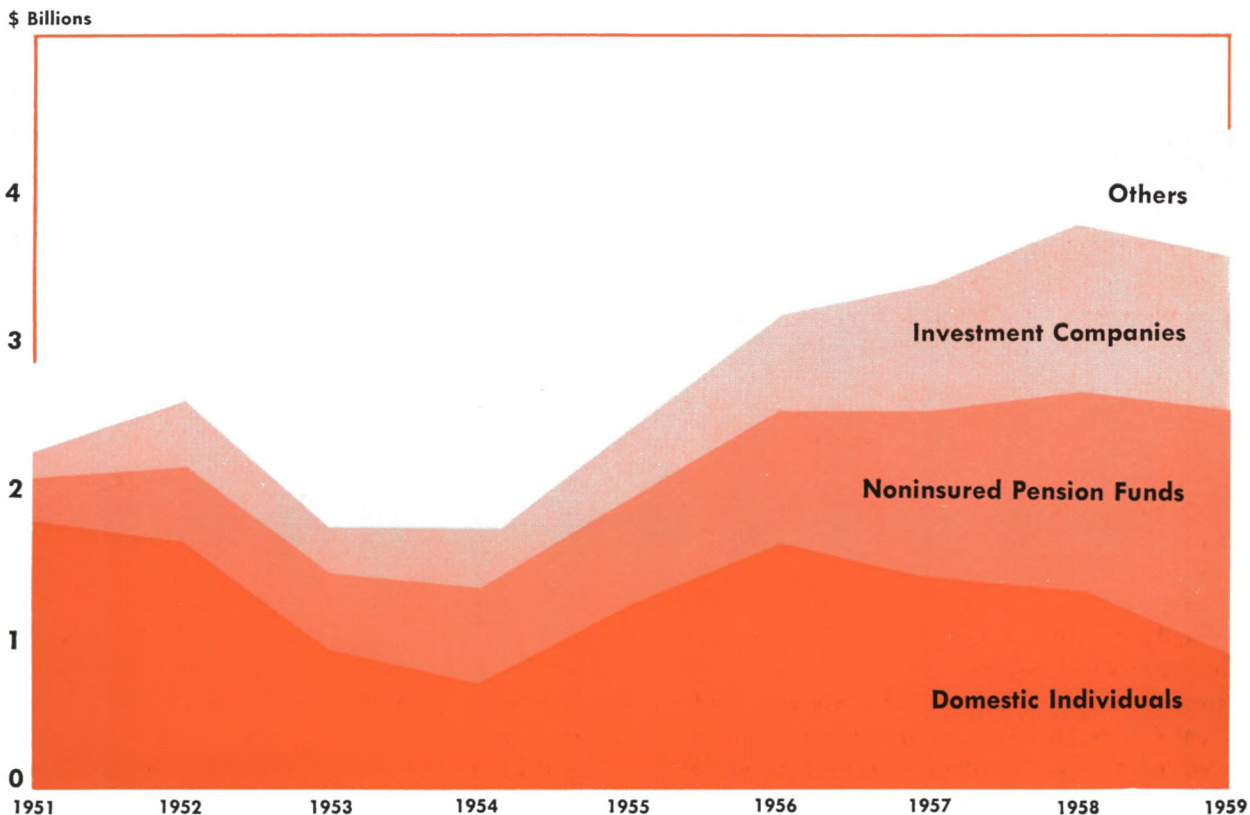
A glance at the accompanying pie chart shows how these influences have shaped investment practices. At the end of last year, corporate bonds topped all other assets combined at book value, but common stock holdings were also quite large.

Government securities holdings were moderate, but investments in preferred stock, mortgages, and municipals were fairly insignificant. Cash and deposit holdings were quite low.

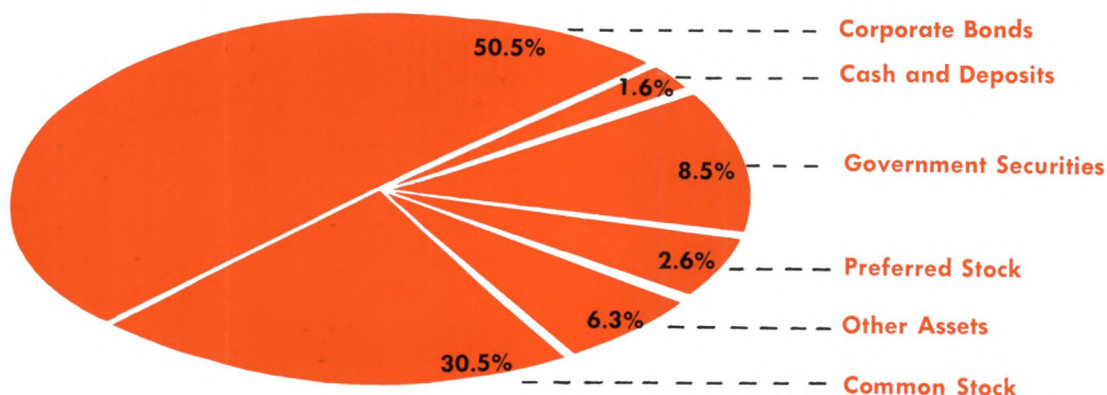
Investment trends over the last few years have involved chiefly (1) a rapid build-up in common stock portfolios, (2) the maintenance of corporate bond holdings at approximately a constant percentage of assets, and (3) considerable liquidation of Government securities. Last year funds poured a record 49% of their net receipts into common stock, lifting holdings to 43% of the market value of total assets. During 1959 the market value of the funds' common stock rose for the first time above that of their corporate bonds.

A BIG SPLASH IN WALL STREET Although they still own only 3% of total American corporate stock, noninsured pension funds are making quite a splash in Wall Street. Last year their net stock purchases again exceeded those of any other group—\$1.6 billion—a whopping 38% of the \$4.3 billion net addition to stocks outstanding. The next most active buyers, investment companies, increased holdings only \$1.0 billion. Individuals, personal trust funds, and nonprofit organizations bought

NET PURCHASES OF CORPORATE STOCK



ASSETS OF CORPORATE PENSION FUNDS December 31, 1959



\$0.9 billion, and "other" institutions and foreigners acquired \$0.7 billion.

Noninsured pension funds also rank near the top of the list of purchasers of corporate bonds and notes. Last year, for instance, life insurance companies bought \$2.3 billion; pension funds acquired \$1.1 billion; individuals, personal trust funds, and nonprofit organizations added \$0.3 billion; and other institutions and foreigners took \$1.0 billion. Total issues outstanding rose \$4.8 billion.

HOW SUCCESSFUL AN INVESTOR? Noninsured pension funds grossed 3.6% in interest, dividends, and rents on the market value of their investments in 1959. Miscellaneous sources of income and profits from sale of securities boosted the return to 4.2%. Expenses were quite small, and the net ran 4.1%. On book value—which was some 11% less—funds grossed 4.7% and netted 4.6% from capital gains and current income combined.

TAXATION AND REGULATION The Internal Revenue Service upon individual application grants noninsured pension plans full exemption from Federal income taxes if they have certain safeguards and meet specified tests of nondiscrimination in favor of higher ranking employees. Such exemption (1) enables employers to deduct, within limits, their contributions in computing taxes, (2) permits employees to exclude employer contributions in figuring their income taxes, and (3) exempts trust earnings from taxation.

Other important regulations include: (1) a Federal law requiring larger funds to file with the

Secretary of Labor annual financial statements and descriptions of the programs and make available copies of the plans for participants and beneficiaries, and (2) laws and regulations limiting the type of investments trust departments of commercial banks are permitted to make. Usually the most effective limitations on funds' investments, however, are those set forth by the sponsoring institutions in their trust agreements.

WHITHER PENSION FUNDS? Noninsured retirement funds have come a long way since the American Express established the first in 1875. Most authorities think they will continue to skyrocket for some time in view of the continued drive for economic security, the comparatively small percentage of the work force now covered by private plans, the continued rise in incomes, and the fact that most funds are not yet fully funded—the point at which contributions no longer exceed outgo. Certainly, they have been surging rapidly ahead of insured funds as a result of their freer rein on investments, greater flexibility of contributions, and completely tax-exempt status.

Major uncertainties facing the funds include: the extent to which unions push for additional coverage, the rising costs of providing pensions, the likelihood of further regulation, and the question as to how liberal "vesting" privileges for resigning employees should be made. Perhaps the most perplexing problem will be the effect of any regulation arising from the current fear that funds may use stock ownership to gain control over corporations.

THE FIFTH DISTRICT

The business climate of the Fifth Federal Reserve District continues to produce a variety of weather bulletins. Local reports range from strongly optimistic to moderately pessimistic depending on the fortunes of particular industries or companies. Most of the information currently available, however, clearly shows fundamental strength. With only minor exceptions, nonagricultural employment, seasonally adjusted, remained high during the entire first half of the year. Seasonally adjusted man-hours in manufacturing industries of the District likewise continued on a high level with only minor declines so far since January. Some District industries, among which textile manufacturers were by far the most important, granted their employees moderate wage increases in the course of the first half of the year.

PERSONAL INCOME HIGH It thus appears that a high level of personal income has been the rule in the District in recent months. And yet the experience of retailers has not fully and consistently reflected this high degree of consumer prosperity. While new automobiles have been selling at a significantly faster rate than they did last year, other consumer durables, especially furniture and appliances, are from the dealers' point of view moving rather slowly. On the other hand, statistical comparisons with previous years do not give a particularly unfavorable picture.

In general, merchants appear to be more than normally cautious in placing new orders with manufacturers. The lack of exuberance in retail markets has already been noted. As both dealers and manufacturers seek new ways to woo their respective customers, the intensity of competition grows in both retail and wholesale channels. Many special deals that are offered as a stimulus to sales involve in some form price concessions which shave profits.

SUMMER SLOWDOWN IN FURNITURE Activity in furniture plants is reported to be slowing down in response to declining retail sales. May was a good month and seasonally adjusted man-hours worked in furniture factories reached a new peak.

Virtually all plants were working full time, plus some overtime. Many plants are still working a full five-day week, but others now find it necessary to cut the work week to four days. Many factory representatives, who attended the June Chicago furniture market fully aware of that market's declining importance in recent years, found even less buying interest there than they had expected. As this is written the markets in New York and North Carolina are in progress with evidence of good attendance. Because of the disappointing response to new lines last spring, some manufacturers have made a special effort to improve designs, and contrary to the usual practice some new models are being shown now in hopes of developing a good volume of fall sales.

Furniture dealers throughout the country achieved a good volume of sales during the early months of the year. Sales by southern manufacturers for the first five months are reported to be nearly 7% ahead of 1959, itself a good year for furniture. During June, however, business fell well below the 1959 level. Currently, dealers seem somewhat pessimistic about prospects for a really good fall pickup. On the other hand, some industry analysts are inclined to feel that there is a latent demand which could become active in the late summer and fall.

District furniture output has fallen below the January-May rate.



TEXTILE MILLS HUMMING A good portion of the assurance needed to counterbalance impressions stemming from weaker aspects of the District business picture can be gained from a glance at the textile situation. In early June mills were still receiving a moderate volume of orders which added to already ample backlogs scheduled for delivery in the fourth quarter of this year and the first quarter of 1961. In late June the flow of orders had dried up almost completely, a normal development in anticipation of the customary closing of textile mills during the week of July 4. Many southern mills, however, are departing from this custom, scheduling the vacation week for later in July or early in August. The change is deemed desirable in many cases in order to maintain production to meet delivery commitments. Other mills have made the change mainly out of consideration for their employees, many of whom prefer to take vacations which do not coincide with the Fourth of July.

Industrial textile prices have remained steady, strengthened in part by a recent revival of orders from automobile manufacturers. Some slowing up of activity in synthetic fabric markets with corresponding easing of prices has been reported. However, this development is not widespread and does not appear to constitute a threat to the basic strength which has characterized synthetic-fiber textiles all year. Yarn mills have been experiencing some falling off of orders, though backlogs of carded cotton yarns reportedly equal about eleven weeks' output.

OTHER EVIDENCE MIXED Among the District's major industrial categories, only mining revealed a decline in employment between May 1959 and May 1960. Reports of further small reductions in District coal mining employment appeared during June. All other industry groups recorded employment increases ranging from 1% to nearly 5% during the year from May 1959 to May of this year. Between April and May slight decreases in seasonally adjusted employment occurred in mining, trade and government employment.

May statistics of seasonally adjusted man-hours in manufacturing industries also show a generally favorable picture. Total manufacturing man-hours in May reached their highest point in twelve months. These gains resulted from widespread increases in the nondurable goods category. April to May declines in food, tobacco, paper and chemicals were more than offset by gains in other

nondurables industries. Durable goods man-hours declined between May 1959 and May 1960 and from April to May this year. The specific industries in which seasonally adjusted man-hour losses occurred between April and May were primary and fabricated metals, nonelectrical machinery, transportation equipment and lumber. Gains in electrical machinery, furniture, and stone, clay and glass industries were not sufficient to offset those losses. District primary metal industries appear to be faring better than those of most other areas. Bethlehem's Sparrows Point Steel Plant in Maryland was reported to be operating at the outset of this month at about 85% of capacity compared with an estimate for the nation of about 60%.

BANKING Loan demand at District banks strengthened during June. In the four weeks ending June 22, loans of weekly reporting banks jumped nearly 3%—a gain which is greater than that achieved in the comparable four-week period of any recent year. Business loan demand was particularly strong.

Despite the additional loan pressures, positions of District banks seem to have eased somewhat in recent weeks. Loan-to-deposit ratios have fallen slightly, the rate of liquidation of investments has slowed a little, and borrowings at the discount window have tapered off markedly. District banks which have been active in the Federal funds market have cut their purchases sharply.

"INDUSTRIAL PRODUCTION—1959 REVISION"

The complete report on the revision of the industrial production index is now available for distribution. The 229 page report provides a detailed description of the new features of the revised index and the methods used in its compilation. The price is \$1.00 a copy up to ten copies and 85 cents for ten or more copies in a single shipment. Orders should be addressed to the Division of Administrative Services, Board of Governors of the Federal Reserve System, Washington 25, D. C.

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