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Overcoming Handicaps In Farm Forestry

AN INCREASE in the yield of present timber stands and shifts of some land from other uses to the growing of trees are essential for many Sixth District farmers if they are to increase their profits from forestry. To obtain the maximum profits the farmer, of course, must fit his forestry operation into his farming system in a manner that will make his available land, labor, capital, and managerial ability yield him the largest continuing returns. Even if all landowners possessed perfect knowledge of the most remunerative alternative use of their land, they would still face certain obstacles such as problems of fire control and marketing, which might prevent the development of their forest lands to the most profitable point. As is the case in many other farm problems, surmounting these obstacles depends upon appropriate community action and upon the acceptance by all persons of certain responsibilities.

Since the conditions under which forestry is carried on vary widely over the District, the particular problems faced by any individual owner of woodland can be met only by specific measures. The most serious problem in one locality, for example, might be the lack of a market for low-grade hardwoods; in another, it might be the damage caused by fires. Professional foresters who work with farmers list many reasons for the generally inefficient operation of farm forests.

Despite the diversity in local conditions, however, some problems are general and engage the attention of almost all the farmers who try to grow trees as a crop. These problems may be physical or economic and are not, of course, mutually exclusive. The protection of trees from damage by grazing animals, for example, is a physical problem in the same sense that the protection of field crops from damage by livestock is. For the farmer who has a very small pasture acreage, however, this problem may also involve economic choices. He may have to weigh the returns from his woodland when used as pasture against the offsetting damage that cattle might do to the trees.

Major Physical Handicap

Of all the physical handicaps to profitable timber production, fire is the most serious. Commercial forestry is seldom, if ever, profitable without adequate fire control. In a recent reappraisal of Southern forests, the United States Forest Service found that only 3 percent of the farm forests in Sixth District states had good fire protection. "Good protection" was taken to mean that the percentage burned annually over a five-year period was less than 3 percent for longleaf-slash pine types, less than one percent for loblolly-shortleaf hardwood types, and less than 0.2 percent for bottomland hardwood types. A "good" rating does not mean that the existing fire protection is all that is desirable or that additional protection would not be beneficial. It merely means that it is the best protection attained so far on any considerable area.

In the same survey, 24 percent of the farm forests were found to have fair fire protection. To receive a "fair" rating, a forest property must conform reasonably well to minimum standards for "good" protection or must show no evidence of fire within the past 10 years. A property is deemed to have adequate protection if it has a rating of "fair" or "good." In Tennessee and Louisiana nearly half of the farm forests are adequately protected. On the other hand, less than a fifth of those in Alabama, Florida, and Georgia have adequate fire protection. For smaller areas, of course, the degree of protection ranges from none at all to "good." Since fire protection is usually organized on a county-unit basis, the farm woodlands in one county may receive virtually no protection while those in an adjoining county may have good protection. Many small properties in areas without organized protection, however, may show little or no evidence of fire damage where there are fire barriers, such as roads, or if the owner has been especially vigilant.

The most obvious damage caused by fire, of course, is the destruction of standing timber. This damage represents large immediate annual losses to District timberland owners, but these losses may easily be exceeded by those of potential future values. Little trees that are so small as to be hidden in the grass may be killed by burning, for example, and without them a new crop of timber cannot be obtained. Young trees that are not killed may be slowed down in their growth. Though larger trees may not be killed, they also may be retarded in growth or so weakened that they lose their resistance to insects and diseases. Even the fully mature trees that survive burning may be greatly reduced in sale value.

The measures currently used to prevent or control fires in the woods are determined in large part by the causes of such fires. Although the causes are many, nearly all fires are caused by man. Of these fires a large proportion are started by incendiaries. According to recent estimates, more than half of the woods fires in Louisiana and about two fifths of those in Mississippi are of incendiary origin. The proportions are similar in the other District states.

In a survey conducted by the Georgia Agricultural Extension Service, farmers were asked: "Why do people burn the woods?" Their answers disclosed that about 27 percent of the fires resulted from carelessness, indifference, and a lack

of appreciation of values destroyed. About a fifth of the fires were deliberately set in an effort to improve the woodland for livestock grazing, and almost as many in an effort to kill snakes and insects. Attempts to destroy boll weevils accounted for about 13 percent, and the removal of fire hazards, such as grass and brush, for 7 percent. A small number of fires were set for spite or revenge, for a thrill, or through the carelessness of hunters and fishermen.

Since most forest fires are caused by man, their control or elimination involves restraint upon human activity. This may take the form of coercive restraint by law, or the self-restraint that results from appropriate educational measures.

All the District states now have laws which, though differing in detail, make the careless or intentional burning of woodlands illegal and provide penalties commensurate with the seriousness of the offenses. Like that of other laws, the purpose is to compel a recalcitrant minority to conform to practices which are considered desirable by the majority. By themselves, however, these laws have proved to be generally ineffective; and prior to the establishment of organized fire protection over large areas they had very limited application. Wherever owners of forest land have come to recognize the need for preventing fire damage, however, and have organized, with the co-operation of the state forestry department, to control fires, laws are an important part of the general fire-suppression program. The files of the state forestry departments contain an impressive record of prosecutions and convictions for violation of fire laws in those areas.

The educational approach to the prevention of damage by fire rests upon the principle that people will not, as a rule, destroy that which they believe to be valuable. Since a large proportion of the fires are set simply because many people do not realize that woodlands can be an important income-producing asset, an educational approach is particularly appropriate in dealing with this cause of fires. Personal contacts are the most effective means of educating those people most directly affected by fires, the landowners. In this work, which is done largely by the technicians of wood-using industries and various government agencies, the strongest appeal to the landowner is the one which shows him that by protecting his timber from fire he can substantially increase his profits. The educational measures directed toward changing the attitude of the general public regarding forest fires, of course, stress the duty of the citizen to preserve the state's natural resources and to help create and maintain wealth that benefits the whole community.

Although its effect cannot be readily evaluated, education undoubtedly plays an important role in reducing the fire hazard to the growing of trees. But, even if education materially reduces the number of fires, profitable forestry is not possible in most areas unless the fires which start are quickly suppressed. For this purpose organized fire-protection systems have proved both necessary and effective. In Florida, for example, where the forest-fire record is one of the poorest in the nation, 32.3 percent of the unprotected area was burned over last year, while only 1.68 percent of the woodlands receiving state protection were burned. The main features of these systems, which are usually administered by the state forestry department, are fire detection from steel lookout towers or planes and mobile fire-suppression crews. In areas where adequate personnel and equipment have been available, these protection systems have reduced fire losses to such an extent that forestry can be practiced at a profit. Although only about a third of the District forest land now receives some sort of organized fire protection, the protected acreage is steadily increasing as more money, equipment, and personnel are made available for this purpose.

For the farm-woodland owner whose profits from forestry depend upon long-run stable operations, however, the simple fact that he has adequate protection now does not completely solve the problem of fire. He must also be assured that the protection will be permanent. Ordinarily, the protection systems that are now used depend upon co-operation between local units, such as counties or parishes, on the one hand and the Federal and state governments on the other. Funds for this work take the form of state appropriations, Federal allotments, and contributions from local governments and private sources. That permanent protection in most areas depends on local sources for a continuing flow of funds and for an authorization of work prevents the present system from being entirely satisfactory. Local sources frequently withdraw their support, thus causing the protection program to be greatly reduced in effectiveness or abandoned. One remedy that has often been proposed is to make the Federal and state governments entirely responsible for forest fire protection. Such a step would undoubtedly go far toward reducing fire hazards and would make forestry a profitable venture for more farmers.

In dealing with the problem of fire, farm owners of timberland have some important advantages over nonfarm owners. Most farm woodlands, which are relatively small, are usually protected by fire barriers, such as roads and cultivated fields. Even when a farmer lives in an area that has no organized fire protection he, himself, can often do much to protect his woods by a few simple but effective measures. Many farm woodlands, in fact, are highly productive primarily because the owners have plowed fire breaks, have properly disposed of slash, and have suppressed fires while they were still small. On most farms only a few pieces of inexpensive equipment are needed for this work. The main requisite for success is a determination on the part of the owner to protect his woods. Individual efforts of this sort, however, can by no means take the place of community and state action. Despite their own efforts to protect their woods from fire, many farmers each year sustain losses of timber values caused by fires beyond their control. Although a farmer owner can control fires more readily than some other types of owners, he too must have organized protection if he is to grow timber profitably.

Other Physical Handicaps

Closely related to the problem of fire control is that of damage done to trees by grazing animals. Since the time of the first white settlements in the District, farmers have been burning the woods in order to increase their value as pasture. In many areas burning for this purpose is still the chief cause of forest fires. When grazed in burned-over woods, the livestock often cause further loss by seriously damaging or destroying the young trees. In the hardwood stands particularly, young trees are killed by all classes of livestock. Grazing by sheep has been found to be incompatible with efficient forestry, even in the pure pine stands. In the longleaf-pine areas bordering the Gulf Coast, hogs have proved very destructive in timber stands.

It has been difficult to prevent damage from grazing in large areas of the District because of the nature of existing stock laws. Although all the states have general stock laws their application is usually left to the discretion of local

government units. As a result most of the counties in the southern part of the District have "open range," on which the livestock owner is not required to keep his livestock fenced in. To protect his woodland in such an area from grazing, a farmer must fence it completely. Most farmers, however, continue to pasture livestock in their woodlands. The greatest progress in the prevention of grazing damage, therefore, has come from management plans that provide for enough increase in the carrying capacity of open-pasture to offset the grazing afforded by woodlands.

The program sponsored by the Florida Agricultural Extension Service is an example of such a plan. In recognition that under present management systems the burning and grazing of timberland are necessary supports of the cattle industry, the suggested plan provides for taking some land out of forest production. On this land are established wide improved pastures to serve as fire barriers around and through the forest area. When sodded with the better pasture grasses, which cattle graze closely, these open areas provide effective barriers. As far as possible the strips are established on ground now sparsely timbered or on that least adapted to timber growing. In small blocks of farm timber these barriers may be from 50 to 60 feet wide, and in the larger timbered tracts they may range from 100 to 200 feet wide. Where the fire hazard is greatest, as much as a fifth of the forest area may need to be in improved pasture for adequate fire protection. Although this plan sacrifices some of the forest area, that which remains can be made to yield more timber products because it will be adequately protected against both fire and grazing damage. The improved pasture strips will more than compensate for the loss of grazing in the timber stands.

Although this program provides for timber growing as well as grazing on the same tract, it embodies the well-tested principle that improved pastures and trees belong on separate areas. Attempts to grow trees and pasture on the same area usually end in a poor job of doing both. If the trees are spaced far enough apart for grass to grow well, they will tend to be too limby and broadtopped to yield valuable timber products. If, on the other hand, the trees are closely spaced so that they will grow tall and produce long, high-value logs, the stands are likely to be so dense that almost no grass will grow beneath them. Recent experiments in Louisiana with artificially planted stands of long-leaf pine showed that when these stands were properly managed for timber products they afforded no economical cattle pasturage after the fifteenth year.

The Florida plan, of course, is not applicable to all District forest areas. It does embody a principle, however, that could go a long way toward overcoming the grazing problem in the growing of timber. To show the farmer that by preventing grazing damage he will increase the profitability of his timberland is not enough. It is far more important that he be induced to adopt for his whole farm a plan which will give him a greater total income and which will also include measures for the protection of his timber from grazing damage.

As far as the annual destruction of timber is concerned, insects and diseases are more serious menaces than fire. The technical means of combating tree diseases and insects are so specialized as yet that they are beyond the reach of most farmers. Losses can be minimized, however, if proper silvicultural practices are followed, since vigorous fast-growing trees are less susceptible, of course, to these hazards than are weak and retarded trees.

Though not strictly a physical-production problem, the lack of equipment for harvesting and delivering timber products to the market may also be a handicap for some farmers. Much of the profit from forestry comes to farmers who use their own labor and equipment in harvesting and delivering the crop. Since most District farmers still use animal power and relatively few have farm trucks suitable for hauling logs, the harvesting and delivering of saw logs is often either too laborious or altogether impracticable. Economy in the use of equipment, of course, is directly proportional to the degree of utilization. The greater the number of hours that a tractor or truck is used per year, for example, the lower its cost per hour. Many farmers with small acreages simply do not have enough productive work in their present timber lots or, indeed, on their whole farms to justify owning much equipment. Overcoming this particular handicap to profitable tree growing may, therefore, involve increasing the size of farms or making farm machinery available on a custom basis.

Economic Handicaps

Most of the economic handicaps to timber growing arise from the necessity of making long-time commitments and that of waiting a relatively long period before returns begin to come in. These are the main differences between growing trees and growing other crops. The farmer who decides to shift most of his time and resources from the growing of cotton to the growing of peanuts must make a decision which involves only one crop year. If he finds that he has made an unwise choice, he can quickly shift back to the original enterprise. The period of time between the original investment and the expected returns is a matter of a few months and is approximately the same for each of these two crops. On the other hand, the farmer who decides to spend his time and resources in the growing of trees, must abide by that decision for a long time. If he spends five or ten years improving his timber by selective cutting, fire protection, thinning, and fence maintenance and then decides to sell all merchantable trees and abandon the practice of forestry, he may find that much of the time and money spent on improvement has been wasted. Since the time and money spent on timber usually yield no returns for several years, the farmer, in appraising optional enterprises, must consider the present worth of future incomes as well as the dollar returns for a given year. Only if he does this will the opportunities for profit from farm woodlands be fully apparent to him.

The cash-crop systems that have distinguished District farming in the past give farmers little or no experience in assessing the current worth of future incomes. The rapidly growing pulp and paper industry, however, is doing much to overcome this handicap. In some areas profitable pulpwood cuttings have been made between 12 and 15 years after the land was artificially planted to pines. Although the development of a large pulpwood market has shortened the waiting period appreciably, forestry still compares favorably with other farm enterprises only in those systems that are based on continuing returns over a long period of years. The livestock farming systems that are now becoming common also serve to provide the needed experience in long-range financial planning. This change to long-range farm plans is one of the most effective means of overcoming the economic handicaps to farm forestry.

To a great extent the success of a long-range project, such

as farm forestry, also depends on the relative stability of prices for the product. Unfortunately, the prices of timber products have fluctuated violently in the past. As a result of these alternating periods of high and low timber prices, future markets have been very uncertain. In periods of general business depression and inactivity in the building trades, forces operating both from the demand side and from the supply side of the price equation conspire to drive down the prices of timber products. In such periods slack demand tends to lower prices. Instead of supply's adjusting itself to the lower demand, however, it actually tends to increase because farmers feel forced to maintain their income by cutting their trees when the general level of farm prices is falling and when there is a considerable volume of rural unemployment. The increase in supply has the effect of aggravating the decline in prices.

In recommending the practice of forestry to farmers, it is true, stress has often been placed on the ability of well-stocked woodlands to provide badly needed income when all farm prices are low. But, if a large proportion of the farmers draw on their timber bank accounts in such periods, they contribute to the instability which has been such a serious handicap in the development of farm forestry. Acting individually, farmers can do little to mitigate the effects of changes in demand that arise from changes in the level of construction or general business activities. They can, however, help to stabilize the supply by practicing selective cutting at regular periods. Farm foresters now stress the long-range management plans that call for cutting to remain fairly constant regardless of prices. Because trees double in volume every few years, a farmer will seldom, if ever, lose money by following this procedure. The increased volume gained by a few years of growth can usually offset any likely decline in the price per board foot.

Among the marketing problems which confront the owner of farm woodland are a lack of market knowledge, the limitations of the market for low-grade hardwoods, and the lack of a ready market for small quantities of forest products. The first of these difficulties is being overcome by the educational work of the foresters, private companies, and various state and Federal agencies. With a little instruction and practice, a farmer can readily learn to measure and grade timber products well enough to obtain full market value for his product.

Finding markets for low-grade hardwoods is primarily a research problem. The United States Forest Service is directed by congressional mandate to emphasize in its wood-utilization research an improvement in the utilization of low-grade hardwoods. Among the more important commercial outlets promising expansion in the use of such woods is that provided by the making of wood pulp, although the growth of Southern hardwoods in pulpwood size now exceeds the drain about 12 million standard cords a year. The Southern pulpwood industry in 1946 used only 1.2 million cords of hardwood and about 7.6 million cords of pine. The industry is interested in using more hardwood, but the greater capacity of the plant now under construction is planned for the use of softwoods. It is reported, however, that a recently developed paper-manufacturing technique may almost double the use of hardwoods for pulp.

If the low-grade hardwoods that interfere with the production of high-quality timber could be destroyed at a low cost, the need for markets would be far less urgent than it is now. Most woodland owners cannot afford to remove undesirable hardwoods by conventional methods unless they can be sold for enough to pay for most of the removal cost. Poisoning, which is now being tested extensively, offers interesting possibilities as a means of low-cost removal. If poisoning costs can be reduced enough, many woodland tracts which now contain a high percentage of virtually worthless hardwood can be restored to high-yielding pine stands.

Because of the present strong demand for most timber products, even a farmer who has only small quantities for sale has encountered little difficulty in marketing his product. In the past, however, this problem has been very serious for some owners of small timber tracts. Other than by an increase in the size of farm woodlands, which would be desirable for other reasons as well, it could be partially solved by an organization that would pool the products of many woodland owners and sell to buyers of forest products in large lots. The few co-operatives that have been started in the District for this purpose, however, have not been particularly successful. To be successful, a co-operative must have a large volume of business and a stable membership. These two conditions have been very difficult to realize in the District.

Institutional Handicaps

In addition to the physical and economic problems associated with timber growing, obstacles of an institutional nature tend to retard the development of profitable forestry. By institutional problems is meant those problems which arise from practices, laws, and customs that have a persistent effect on the economic activities of the community. Responding to a questionnaire sent out in 1942 by the Society of American Foresters, a total of 167 foresters from 42 states listed the reasons for their difficulty in arousing the farmers' interest in forestry. Opposition to change and general apathy made up 15 percent of the 256 reasons listed. Because the attitudes of farmers toward practicing forestry are bound by custom they are for that reason difficult to overcome. Many of the older farmers can still recall the cutting of virgin-timber stands. Since there has been no tradition of growing timber as a crop, most farmers have simply allowed their trees to grow, except for those they cut for firewood, fence posts, and other farm needs. When the second-growth stands have become valuable either because of higher prices or additional volume they have usually been sold on the stump, by the tract, with the buyer cutting all the trees that he considered valuable. Burning to kill insects or to improve the woods for grazing purposes has been customary in most areas ever since the land was first cleared for settlement. To uproot these prevailing customs with their attendant attitudes and replace them with the practice of "cropping" timber stands and protecting the stands from damage just as other crops are protected has been one of the main tasks of farm foresters. A forester's most effective tool has been to show the farmer in his own woods just what the practice of farm forestry means. Although lectures, demonstrations, meetings, and similar expedients are helpful in arousing interest, this personal service has produced the most tangible results.

Customs with regard to land ownership also account in part for the attitude of some farmers toward long-range projects, such as forestry. In contrast to some countries where farm land is treated as a trust and is handed down intact from generation to generation, land in this country is usually bought and sold like any other commodity. Last year one in every 20 District farms changed hands in an outright

sale. In 1940 the average owner-operator had been on his farm only about 15 years.

Under these rather unstable conditions of ownership many farmers can make very little profit from tree growing. Farm woodlands that are badly understocked as a result of fires and overcutting often require at least 15 years of intensive management before they become profitable again. Since most of the changes in farm ownership are made for unavoidable causes, there needs to be found some method by which the seller of farm woodlands can be compensated for the improvements he has made in their earning capacity. In some cases, of course, the seller is compensated by getting a higher price for his farm when the timber stand is improved. But, because many prospective buyers do not appreciate the value of productive woodlands, the increase in selling price is seldom proportional to the growth of the woodland's earning capacity. In the case of farm transfers this type of problem has sometimes been solved by father-and-son-transfer agreements. Such an agreement usually provides for transferring ownership of the farm to one of the sons when the parent is ready to retire. The new owner assumes a mortgage equal in amount to the claims of any remaining heirs and retires the debt in instalments that he pays out of profits from the farm. Since the transfer price is based upon the farm's estimated earning power, the parent is assured of compensation for any additions to earning power that he may have made. It is thus transferred as a going concern, and all the advantages of stable ownership, including profitable timber growing, are retained.

Even on farms where ownership is comparatively stable, rapid changes of operators may also prevent the growing of trees as a crop. The operators of rented farms move more often than do the owner operators, and they usually have even less interest in enterprises that require long periods of time to become profitable. About two thirds of the tenant farmers have been on their present farms less than five years. Only about one tenant in every 10 stays on the same farm for 15 years or longer. Since the tenant, under most leasing arrangements, is permitted to harvest only enough timber products for fuel wood, fence posts, and other farm needs, he has little incentive to improve the timber stands. The owner of rented farms, many of whom do not live on the property, often find the protection of the timber from fire and other hazards so expensive that they cannot practice forestry at a profit.

One of the most promising measures for solving this problem may be the type of agreement now used to some extent in connection with soil-conservation improvement. In such an agreement the owner compensates the out-going tenant for the unused value of the tenant's investment in soil conservation and other farm improvements. In this way the tenant is assured of compensation for the time and money that he spends in improving the farm even if he has to move before reaping the benefits from the improvements himself. Few such agreements on District farms are now in effect. In Georgia, for example, according to a study published in 1942 by the Georgia Experiment Station, only one in a hundred of the landlords who held written leases had made any provision in the lease to pay the tenant for unexhausted improvements. There is little information available on how a similar agreement in connection with farm woodlands might work in practice. Since about a third of the District's farm woodlands are on tenant-operated farms, however, there is a grave need for serious study of this and other devices for promoting more profitable forestry on rented land.

Of the hindrances to the practice of farm forestry that result from prevailing laws or customs, taxation of forest land has probably been the one to receive the most widespread attention. As early as 1907 the Alabama legislature enacted a law providing for certain tax exemptions "in order to encourage the practice of forest culture." Louisiana and Mississippi also now have laws that include special provisions for the taxing of forest land.

The general property tax is mainly responsible for the special problem of forest taxation. Property taxes must be paid annually, whereas the returns from timber growing are often received only at intervals of several years. During the period required for timber values to materialize, the forest owner receives no annual income from his timber that can be used to pay taxes. Many states have experimented with various schemes of taxation designed to remove this handicap. Yield taxation in lieu of property taxation, deferment of property taxes, and separate taxation of the timber and the land are some of the more common expedients.

Tax changes have not generally been very effective in stimulating the practice of forestry. For the farmer, the tax problem is probably not the most important deterrent to the practice of forestry, because he must pay the taxes on his present woodland regardless of whether or not he attempts to grow periodic crops of forest products. The tax burden becomes important, however, when he is considering a new investment in timberland. Special treatment of forest lands for tax purposes, therefore, might encourage farmers to increase their woodlands by buying adjoining tracts that are not now in farms.

If farm woodlands could be, and were, made to return high yields on an annual basis, the general property tax would impose no greater burden on timber growing than it does on other land uses. Many of the other foregoing obstacles to timber growing would likewise disappear under a modern system of sustained-yield forestry. A change in farmers' attitudes so radical that trees would come to be regarded as a crop is, therefore, probably the most crucial step yet to be taken in achieving more profitable forestry.

Summary

If each farmer who wanted to grow trees had to overcome all of the obstacles individually, the case would be hopeless indeed. For most farmers, however, forestry would be profitable if only a few of the present handicaps were overcome. Some of these, such as the slow rate of growth that is typical of some sites and the inferior quality of some new growth, are subject only to limited control, if any.

On the other hand, many of the obstacles to the development of forestry can be eliminated or at least greatly reduced by applying well-tested methods. Fire losses attributable to carelessness or malice require appropriate public action. Changes in the methods of taxing forest property are also a public responsibility. The research of private industry and public agencies in wood utilization and the educational activities of Federal and state governments are examples of collective effort to overcome the present handicaps to a development of farm forestry. Because many of these obstacles are amenable to control and because their removal would be beneficial to farm woodland owners, all programs moving to eliminate them merit the careful attention of everyone interested in the welfare of Sixth District agriculture.

BROWN R. RAWLINGS

Deposit Turnover

A Guide to Sixth District Economic Activity

THAT the public's spendings during any year are many times greater than the amount of money—currency plus bank deposits—in existence is, of course, obvious. This is confirmed by the personal experience of most individuals, because few persons possess at any time an amount equivalent to that which they spend during a year. A consideration of the possible effect of the money supply on the price level or business activity, therefore, necessarily involves some measure of how actively the money supply is used. This use of the money supply is sometimes termed the "velocity of circulation" and at other times the "turnover of money."

Monetary theorists have recognized the importance of measuring this rate of activity and have incorporated the velocity of circulation in the so-called equation of exchange. A simplified form of the equation is as follows: $P=\frac{MV}{T}$. Without necessarily ascribing any causal relationship between the terms, "P" represents the general price level; "M" the quantity of money and bank deposits; "V" the rate at which the money supply is used; and "T" the total volume of transactions. Recognizing the importance of "V" in analyzing economic activity is, of course, fairly easy, but measuring it is relatively difficult.

The practical difficulties in measuring currently how actively coin and currency is used can be easily understood. Under modern conditions, however, bank deposits represent from 65 to 85 percent of our money supply, depending upon the types of deposits included in the calculation. Moreover, banks keep accurate accounting records. Consequently, most efforts to measure the turnover of the money supply are directed to measuring the turnover of bank deposits.

Turnover of bank deposits is calculated by dividing the total amount of charges drawn against the banks' deposit accounts, as represented by bank debits, by the average amount of deposits held during the same period. The turnover rate is generally calculated on an annual basis. Thus a turnover rate, for example, of 14.5 merely means that debits on an annual basis are 14.5 times the average deposits of the bank during the specified period. The calculation of deposit turnover consequently requires current data on both bank debits and deposits. Bank debit and deposit data are currently collected through the Federal Reserve Banks and the Board of Governors from banks in 333 cities throughout the United States. Debits to both demand and time deposits, including the deposits of the Federal Government as well as business and personal accounts, are included in the reported figures. From these data the turnover rates that are published monthly in the *Federal Reserve Bulletin* are calculated. The table on page 828 in the July *Bulletin,* for example, shows that during May the annual rate of turnover for the reporting banks in New York City was 23 and for other reporting centers was 12.4, compared with 19 and 11.3, respectively, for May 1947. Parts of the series are available as far back as 1919.

By definition a greater stability would be expected of time deposits than of demand deposits. The inclusion of time deposits in a series, therefore, probably makes the data less sensitive to economic changes than they would be if time deposits were excluded. Moreover, the inclusion of Government deposits, especially during the war years, makes the series less reliable as an indicator of business and personal spending. Both to remove some of these weaknesses and also to make the data available sooner than is possible in a monthly series, the weekly reporting banks in leading cities report to the Federal Reserve Banks each week the total of their debits to demand deposit accounts only. Besides excluding interbank accounts, these reports exclude debits to Government deposit accounts. This series is also published in the *Bulletin.* As would be expected, the rates of turnover for these deposits are higher than the rates for time and demand deposits combined. In May, for example, the *Federal Reserve Bulletin* reports that the rate for New York City was 27.9, whereas that for other leading cities was 18.7.

In order to follow developments within the Sixth Federal Reserve District, this bank in 1942 began publishing in the *Review* the turnover rates of demand deposits, except interbank and Government, for the leading cities of the Sixth District. Data are available beginning with August 1934. At present the series consists of data from 28 weekly reporting banks whose deposits constitute approximately 40 percent of total deposits in the Sixth District banks. In this issue the rate for July is given on page 89. The turnover rates are seasonally adjusted for the purpose of making month-to-month comparisons. Finally, to assist in making long-range comparisons the seasonally adjusted rates are converted into indexes using the average for 1935-39 as 100.

The chief significance of such a series lies in the changes over a period of time rather than in the rate at any one time. Differences in rates between banks and groups of banks may result merely from differences between the size of the banks in the groups, their location, or the nature of their deposits. In the Sixth District, for example, the median rate of turnover of the 121 member and nonmember banks reporting their deposits and debits in June to this bank was 10 for both time and demand deposits combined. The turnover rate was lower, of course, than the turnover of demand deposits at the weekly reporting banks. The rates for the 121 banks, however, varied from an annual rate of 4.2 at one bank to one of 23 at another.

As a general rule, the larger the bank—the higher the rate of turnover. When the Sixth District reporting banks were grouped by size, it was found that the average rate in June increased for each size group from 9.1 for banks with deposits of less than 5 million dollars to 14.8 for banks whose deposits were over 125 million. Yet within each size group there were a number of exceptions. Some small banks, for example, had high rates of turnover. Sometimes these banks were located in large cities, but more often the high rate of turnover seems to be explained by the low proportion of their time to total deposits.

Although seasonal adjustments improve month-to-month observation, more interest is attached to the changes in the rate over longer periods of time. Those who have watched the turnover rates and the indexes published every month in the lower righthand corner of "Sixth District Indexes" in this *Review* noticed the gradual decline in the index during the war years. Starting with December 1941, at a seasonally ad-

justed rate of 93 percent of the 1935-39 average, the index rose somewhat in the first quarter of the following year; but afterwards the general trend was downward until by October 1945 the index was only 59. The chart on this page shows that during this period demand deposits at the banks were increasing, chiefly because of war-financing activities of the Federal Government. The pressure that these expanded deposits might have exerted upon the general price level was consequently reduced because of the lower turnover rates.

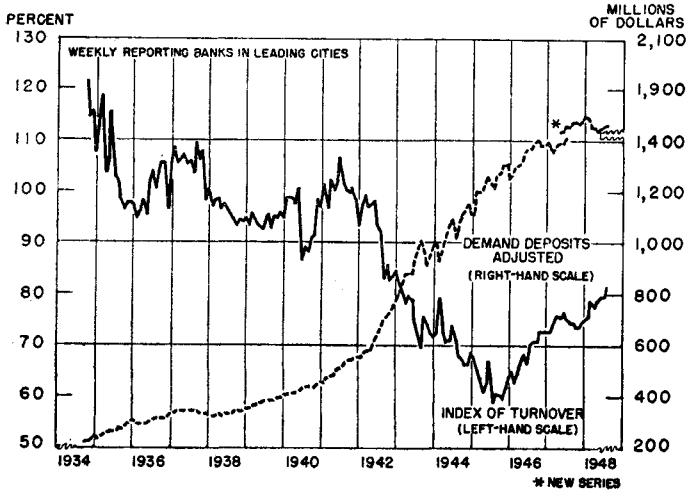
A decline in the index during the war years when deposits were expanding reflects the accumulation by both businessmen and individuals of larger bank balances. Individual incomes were expanding but purchases were curtailed, not only because of rationing but because of the nonavailability of many consumer goods. Businesses also built up their cash assets, in some cases to finance planned postwar expansions.

For the rate of deposit turnover to decline at the same time that deposits were expanding was contrary to previous experience. Although the Sixth District index goes back no further than 1934, the behavior of the District turnover rate probably closely resembled that of the national series which begins with 1919. This series indicates that, in general, periods of deposit expansion have been paralleled by periods of increased deposit activity.

Probably the reason for this parallel behavior is that the same conditions that influenced changes in the deposits influenced changes in the rate of deposit use. Expanded business and industrial activity brings with it an expansion in bank loans which in turn results in greater deposits. Such business activity means more active spending. A contrary condition is characteristic, of course, of periods when business and industrial activity is declining.

Although it was generally true that both deposits and turnover rates rose during the 1920's, the turnover rates did not begin to rise much until 1924. During the last five years of the period the increase in the rate was rapid. In 1929, for example, the demand deposits at the weekly reporting banks in New York City were used, on an average, 124 times a year, whereas those outside New York were being used at the rate of 41 times a year. In 1920 the ratio had been 60 for New York and 37 for other cities. Much of the increase in the New York City rate, of course, was explained by increased stock-market trading.

TURNOVER OF DEMAND DEPOSITS
SIXTH DISTRICT



Between 1929 and 1932 both demand deposits and the rate of turnover at the weekly reporting banks declined. There were annual increases in the demand deposits of these banks beginning with 1934 and continuing through 1937, but the rate of turnover remained practically unchanged until 1937.

If there is anything to be learned by this brief and necessarily cursory study of the past behavior of the rates of turnover, it is the necessity of considering the rates at which deposits are used before making generalizations about the effect that changes in the quantity of deposits might have upon prices and general business activity. It is further evident that changes in the quantity of money may exert quite different effects, depending upon the stage of the business cycle. Injection of additional quantities of money in the form of deposits into the economic system during a period of high business activity is much more likely to exert an upward pressure upon prices than during a period of recession. During a period of a high level of activity, the pressure upon prices comes not only from increased deposits but also from the greater use of those deposits.

A further corollary stems from this conclusion. It is generally agreed that, theoretically at least, deposit expansion can be controlled through central bank activity. It is also generally agreed that it is possible to increase bank deposits through co-ordination of the central bank's operations with the financing activity of the Government. But what effect these actions will have upon the economy depends greatly upon the degree to which deposits are used. That use is something over which the central bank's influence is extremely limited.

The behavior of the turnover rate since the close of the war, consequently, deserves close attention. Those who have followed the changes from month to month since 1945 have noticed that the District's seasonally adjusted index has risen rather consistently from its low point of 59 in October 1945 to 81.5 for July this year. The October 1945 index represented a seasonally adjusted turnover rate of 14.6. In July of this year the index represented an annual rate of 20.1. The increase in the rate of turnover, which has been general throughout the country, explains in part how the pressure of purchasing power on prices has been greater than can be explained by an increase in deposits alone. Demand deposits adjusted at the Sixth District weekly reporting banks, as a matter of fact, were smaller at the end of July this year than they were at the beginning of the year. The use of these deposits on a seasonally adjusted basis, however, has increased 9 percent.

If the experience of the past is any guide, the injection of new purchasing power in the form of deposits at a time when prices are rising rapidly is likely to be accompanied by an increase in the use of that purchasing power. Existence of such a condition at the present time, therefore, explains much of the concern of monetary and banking authorities about possible consequences of a further general expansion in bank credit. It also explains why the use of the mechanism of monetary and banking controls alone may not be sufficient to halt price inflation.

CHARLES T. TAYLOR

This is the seventh in a series of articles on the indexes published regularly in the Monthly Review. *Figures for each month beginning with August 1934 for the turnover of demand deposits are available on request to the Research Department of this bank.*

District Business Conditions

Farm Prices and Retail Food Prices

SINCE price controls were removed in 1946 the average price received by farmers for all farm products has increased about 35 percent. This rapid advance has been accompanied by an even more rapid increase in retail food prices. In May of this year the annual retail value of the food in the typical family "market basket" was about $693, or 44 percent greater than it was in June 1946. The market basket includes the quantities of farm-produced food purchased by a family of three average consumers during 1935-39. Because foods consumed in the household of producers and foods of nonfarm origin are excluded, the market-basket figures are suitable for depicting relationships between changes in farm prices and changes in retail food prices.

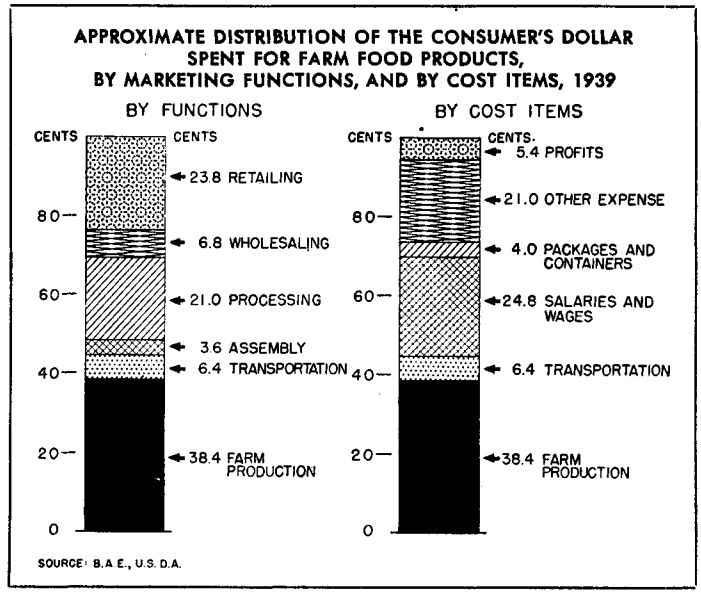
Farm-price increases accounted for only $90, or about 42 percent, of the $212 increase in the retail value of the market basket from June 1946 to May 1948. Charges for marketing farm food products came to $346 in May, the highest they have been since 1920. The farmer's share of the consumer's dollar spent for food, however, was lower in that month than it was in any month during the past five years.

Retail prices for meat and meat products, which before the war accounted for about one fourth of the family food bill, have risen faster than those for any other commodity group. Although changes in the farm value of meat during the past two years account for only about one fifth of the increase, meat is such a large item in the family food bill that the currently high livestock prices are attracting much attention as one of the main causes of the high cost of food. In May the farmer's share of the consumer's dollar spent for meat was 64 cents, the lowest it has been since February 1942; but the marketing charges for meat in the market basket reached an all-time high of $72. Less than half of the 95-percent increase which occurred in retail meat prices from June 1946 to May 1948 is therefore attributable to changes in livestock prices.

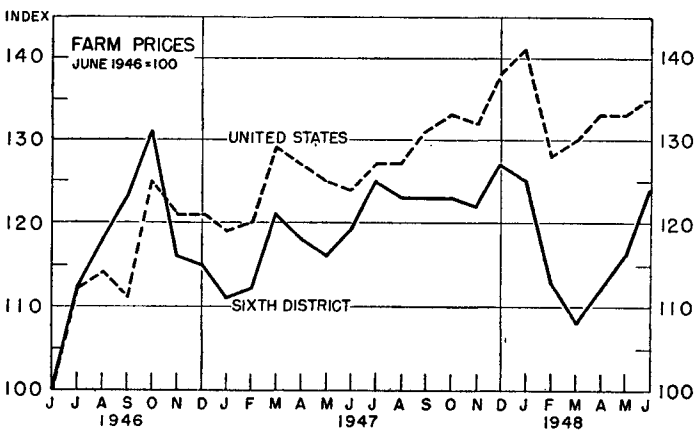
Changes in the farm price of dairy products, which were about one fifth of the family's food expense before the war, accounted for about 12 percent of the increase in the retail food cost from June 1946 to May 1948. Farmers received about two thirds of the 39-percent increase in the retail value of dairy products.

For the other products, which constitute over half of the total retail value of the market basket, increases in prices received by farmers have had little or no effect in increasing the cost to consumers. The retail value of cereal products increased 38 percent. Only 28 percent of this increase was caused by increases in the farm prices of food grains. Fresh fruits and vegetables and canned fruits and vegetables increased in retail value 13 percent and 21 percent, respectively. Both increases were caused by higher marketing charges.

The farm price-support program has played a very minor role in contributing to the increase in food prices. Most prices of farm products, of course, have been well above support levels ever since price controls were removed. The increase in the farm value of potatoes, the only major food commodity for which large-scale price-support operations have been conducted, accounts for less than one percent of the increase in the retail value of the market basket.



Because marketing charges have absorbed over half of the increase in the retail value of the market basket, it should not be inferred that the individuals and agencies who perform the marketing function are mainly responsible for the increases in food prices. Wages and salaries make up about 40 percent of the food-marketing cost. The hourly earnings of persons engaged in food processing and marketing have increased, but the increases have been comparable to those in other occupations. Freight rates, the prices of containers and packages, and the prices of nearly all items entering into operating expenses have also increased.



Not all farmers or all agricultural regions have had equal increases in farm prices. Since June 1946 the average of all District farm prices, for example, has risen only 24 percent. District farmers have shared to only a limited extent in the rapid rise in livestock prices. Of the six states, only Tennessee produces enough livestock to fill the meat requirements of its population. The farm value of fruits and vegetables in the market basket was actually lower in May of this

year than it was in June 1946, when these commodities accounted for one fifth of the District farmer's total cash receipts from marketing.

Much of the responsibility for the rapid rise in food prices rests, of course, upon consumers themselves. Generally, they have used their record disposable personal incomes not only to obtain a larger quantity of food than they obtained before the war, but also to shift from less expensive and less highly processed foods, such as potatoes, to relatively expensive and highly processed foods, such as meats. In the first quarter of this year consumers could have bought the 1935-39 average annual quantity of food at a cost of $262 per person. Although they spent 23 percent of their disposable income for food in 1935-39, they could have obtained the 1935-39 average annual quantities for only 21 percent of their disposable income at 1948 prices. During the first quarter of 1948 their actual food expenditures amounted to an annual rate of $381 per person, or 30 percent of their disposable income. At least 45 percent of the total increase in the food bill from the prewar period to 1948 occurred because of increased purchases rather than from price increases. The effect of this rapid increase in consumption on prices cannot be isolated readily. For some commodities, such as meat, however, where consumption per person increased from 126 pounds to 155 pounds, and where demand is relatively inelastic, the effect undoubtedly has been to push prices far above the level that would prevail if all consumers were content to eat only 125 pounds of meat per person. Recently there has been some evidence that consumers are spending their food dollars more carefully in order to offset higher prices, but food consumption generally is still at a very high level both as to quantity and quality.

Although the 1935-39 average annual quantity of food consumed could now be purchased with a smaller percentage of average disposable income per person than was required in the prewar period, many consumers are having difficulty in obtaining sufficient food at current prices. All consumers, of course, are not "average." For the consumers whose incomes are below the per capita average, food is the most important single category of expenditures. These consumers receive less than half of the total income, but their food bills account for considerably more than half of total expenditures for food.

From the nature of the price structure of food, the greatest potential opportunity for reducing food costs and so giving some measure of relief to low-income consumers might seem to lie in a reduction of the charges for marketing. Such a reduction could be accomplished by a more efficient organization of the factors of production used in marketing or by lowering their unit costs. Unfortunately neither course offers much hope for lower food prices. Efficiencies in marketing are occurring almost daily but to a large extent they are offset by consumers' demands for more marketing services which tend to increase marketing costs. Barring a precipitous drop in the general price level, little or nothing can be done to reduce the unit costs of the labor, transportation, and materials used in marketing and processing.

On the farm side, food prices could be lowered appreciably only by a drastic drop in prices received by farmers or by a policy of Government subsidization. Unless nonfarm employment falls rapidly and Government farm-price supports are removed, there appears to be little likelihood of a major decline in farm prices. The effect on food prices of a

Sixth District Indexes

DEPARTMENT STORE SALES*

Place	Adjusted**			Unadjusted		
	July 1948	June 1948	July 1947	July 1948	June 1948	July 1947
DISTRICT	392	397	336	314	333	269
Atlanta	408	429	394	326	352	315
Baton Rouge	422	389	368	354	343	309
Birmingham	400	396	303	344	341	260
Chattanooga	380	368	302	315	331	251
Jackson	327	352	302	261	295	241
Jacksonville	424	420	405	352	369	336
Knoxville	422	445	291	351	365	242
Macon	299	311	278	233	264	217
Miami	410	401	363	291	321	257
Montgomery	387	375	326	314	315	264
Nashville	417	456	387	334	420	310
New Orleans	357	346	305	285	305	244
Tampa	482	513	441	400	461	366

DEPARTMENT STORE STOCKS

Place	Adjusted**			Unadjusted		
	July 1948	June 1948	July 1947	July 1948	June 1948	July 1947
DISTRICT	333	342	270	343	346	278
Atlanta	432	450	369	418	413	357
Birmingham	306	296	234	277	278	212
Montgomery	455	434	383	364	396	306
Nashville	611	553	496	529	516	429
New Orleans	367	370	288	337	347	264

GASOLINE TAX COLLECTIONS***

Place	Adjusted**			Unadjusted		
	July 1948	June 1948	July 1947	July 1948	June 1948	July 1947
SIX STATES	193	193	173	190	194	170
Alabama	201	194	178	196	203	173
Florida	185	176	166	172	176	154
Georgia	184	177	165	179	182	160
Louisiana	209	177	157	205	181	154
Mississippi	186	196	188	181	202	183
Tennessee	206	232	202	208	235	204

COTTON CONSUMPTION*

Place	July 1948	June 1948	July 1947
TOTAL	119	148	125
Alabama	125	161	137
Georgia	121	145	120
Mississippi	60	93	117
Tennessee	97	136	117

ELECTRIC POWER PRODUCTION*

	June 1948	May 1948	June 1947
SIX STATES	332	327	284
Hydro-generated	233	250	226
Fuel-generated	462	429	359

MANUFACTURING EMPLOYMENT***

Place	June 1948	May 1948	June 1947
SIX STATES	145	145	142
Alabama	157	157	153
Florida	132	136	129
Georgia	133	133	130
Louisiana	141	139	139
Mississippi	149	150r	155
Tennessee	155	155r	151

CONSTRUCTION CONTRACTS

Place	June 1948	May 1948	June 1947
DISTRICT	507	505r	332
Residential	707	713r	414
Other	410	404r	293
Alabama	453	458	434
Florida	633	582	372
Georgia	482	397	243
Louisiana	350	514	255
Mississippi	182	393	156
Tennessee	630	501	471

CONSUMERS' PRICE INDEX

Item	July 1948	June 1948	July 1947
ALL ITEMS	178	176	164
Food	222	218	202
Clothing	201	201	181
Fuel, elec., and ice	137	135	130
Home furnishings	190	190	178
Misc.	201	148	143
Purchasing power of dollar	.56	.57	.61

*Daily average basis
**Adjusted for seasonal variation
***1939 monthly average = 100; other indexes, 1935-39 = 100

ANNUAL RATE OF TURNOVER OF DEMAND DEPOSITS

	July 1948	June 1948	July 1947
Unadjusted	18.9	19.5	17.2
Adjusted**	20.1	19.7r	18.3
Index**	81.5	79.7r	70.8

CRUDE PETROLEUM PRODUCTION IN COASTAL LOUISIANA AND MISSISSIPPI

	July 1948	June 1948	July 1947
Unadjusted	290	284	251
Adjusted**	290	286	251

r Revised

minor price decline, like the commodity price break of last February, would be slight. With present marketing charges, the retail value of the market basket could not return to 1935-39 levels even if farmers were forced to give their products away. Government subsidies and price roll-back operations also appear unlikely in view of the very large expenditures that would be required.

A further substantial increase in farm production offers the best possibility for providing the high level of food consumption that consumers want and that is desirable from the standpoint of the nation's health. In the case of some crops, such as corn and wheat, the increase in production is already a reality. In the case of others, such as livestock, currently high prices are not performing the function expected of them in a competitive economy, that is, the bringing forth of more production. Although it is not physically possible during the next two years for increases in meat production to have much effect on meat prices, it is possible to increase meat supplies over a longer period and so affect prices. Uncertainty regarding the future course of prices in general is causing livestock producers to delay building up their breeding herds. Even though current livestock prices are favorable to producers, the cattle producer who contemplates increasing his herd now, for example, must also reckon with the trend of livestock prices three or four years hence. The present long-range farm legislation would enable him to do this better than in the absence of such legislation. As long as support prices are tied to the parity index, however, the support program would be of little help to farmers in the event of a general price decline. Any action to eliminate some of the current uneasiness about the trend of prices in general for the next several years should, therefore, stimulate greater meat production. B. R. R.

Trade and Consumer Credit

Greater credit sales continued to support consumer buying in the Sixth District during July. Cash sales at reporting department stores were up 5 percent over July 1947 sales. An increase of 75 percent in instalment sales and one of 17 percent in charge-account sales, therefore, brought total sales up 15 percent above those of July last year. During the first two weeks of August, sales at the weekly reporting stores were 14 percent greater than they were during the corresponding period last year.

Credit sales were also larger at the other important credit-granting stores in the Sixth District. Although cash sales at furniture stores in July were down 26 percent from those of July last year, instalment and other credit sales were up 24 percent, and therefore total sales increased 13 percent. By selling 43 percent more on credit, household-appliance dealers were able to bring their total sales up 29 percent even though cash sales were down 2 percent. Jewelry stores reported an 18-percent increase in credit sales. Instalment credit granted by these stores throughout the United States together with that granted by mail-order stores constitutes approximately 85 percent of other than automobile instalment sale credit outstanding.

The increase in the outstanding credit at such stores combined with the increase in automobile sale credit accounts for almost half of the total increase in consumer credit between the end of June 1947 and the end of June 1948. On June 30, 1948, total consumer credit in the United States, according to the estimate of the Board of Governors, amounted to 14.1 billion dollars. Of this total, 3.4 billion was instalment sale credit.

Consumers have thus been able to secure goods with a greater value than the amount of their cash expenditures. Of course, a condition of this kind will last only so long as the increase in credit granted exceeds the increase in the amount of collections; such a condition has prevailed since the close of the war. The increase in accounts receivable at a representative group of Sixth District department stores, for example, between the end of June 1947 and the end of June 1948 was almost four times as great as the increase in collections.

Consumer sale credit outstanding has grown not only because of greater credit sales, but also because of a gradual lengthening of the time for which the credit is outstanding. Before consumer-credit control under Regulation W expired on October 31 last year, control was confined to credit granted consumers for purchasing automobiles, a specified list of major household appliances, and furniture. According to the regulation, a down payment of at least one third was required for automobiles with 15 months as the maximum maturity. Similar terms were prescribed for major household appliances. For furniture, 20 percent was set as the minimum down payment with a maximum maturity of 15 months.

At present, according to a recent survey, in one leading city of the Sixth District, the usual terms are one third down for new automobiles and sometimes more for used cars. Payment periods for new automobiles extend up to 24 months, for prewar used cars up to 15 months, and for postwar used cars up to 18 months. Terms for household-appliance contracts range from 12 to 24 months with down payments of from 20 to 33-1/3 percent required. At furniture stores the prevailing terms are 20 percent down with payment periods extending up to 15 months. More lenient terms are sometimes granted.

Actual experience at Sixth District reporting stores also indicates that the average time for which accounts are outstanding has lengthened since the removal of consumer-credit control. On the basis of current collection ratios, instalment accounts of reporting household-appliance stores in the District are outstanding, on an average, for approximately 14 months. In October 1947, the last month of consumer-credit control, they were outstanding for 6½ months. The average furniture-store instalment account is now outstanding for approximately 9 months, compared with 6 months last October. Department stores report their instalment accounts outstanding for approximately 8½ months, compared with 7 months last October, and 5½ months in June 1946. Jewelry-store instalment accounts average about

Bank Announcements

The Gulf Beach Bank, St. Petersburg Beach, Florida, a nonmember bank located in territory served by the Jacksonville branch, began remitting at par August 9.

This bank opened for business on July 29, 1948, with capital amounting to $75,000, surplus $50,000, and undivided profits $25,000. At present its deposits are well over the half-million-dollar mark. Officers of the bank are J. C. McCrocklin, president; and J. Lee Ballard, vice president and cashier.

8 months now, compared with 7 months last October and 4½ months in June 1946. These averages, of course, include the instalment credit granted for merchandise which was formerly free from consumer-credit control as well as for the listed articles.

Consumers have been able to finance purchases through funds secured from various lending agencies, in addition to the credit granted by retailers. On June 30, Sixth District consumers owed the area's commercial banks an estimated 78 million dollars which had been borrowed to buy automobiles and 36.3 million dollars which had been borrowed to buy other goods. Although not incurred directly to finance purchases of goods, the remainder of the 202 million dollars of consumer instalment credit outstanding at the District's commercial banks probably increased consumer spending indirectly. Between the end of June last year and the end of June this year, total outstandings increased 68.7 million dollars, and 56.3 million dollars of that increase occurred since the end of October.

New regulations, effective September 20, have been issued by the Federal Reserve Board under the powers granted it by Congress at the recent special session. Substantially the same articles formerly controlled by Regulation W are listed. The principal difference between the present regulation and the regulation in force when the control was terminated is that automobiles are now the only article for which a down payment of a third is required. For other items the minimum down payment is set at 20 percent. Another difference is that a maximum of 18 monthly payments is allowed when the price of the listed articles amounts to more than one thousand dollars in excess of the down payment.

Although the instalment sale credit arising from the purchases of the articles upon which credit controls are reimposed constitutes a comparatively small part of total consumer credit, growth in this type of credit has, nevertheless, been one of the most important factors accounting for the total increase in consumer credit. A limitation on its further growth under the new controls may consequently contribute somewhat to a lessening of inflationary pressures.

C. T. T.

Industry

Activity in building and construction in the Sixth District has continued at a high level. The volume of construction contracts that have been let in recent months presage no early reversal of this trend. The total value of contracts awarded in the District during the first half of 1948 amounted to 541 million dollars, the largest total for the January-June period of any year on record, and a 51-percent increase over the corresponding period of 1947. A part of the increase, of course, is due to the continued advance in construction costs.

According to the index compiled by the American Appraisal Company, construction costs in 30 cities throughout the United States were, on the average, 14 percent higher in June this year than they were in June 1947, and the increase in the index for Atlanta in that 12-month period was 17 percent. The larger part of these increases occurred in the last half of 1947, because the 30-city index advanced only 3.8 percent between December 1947 and June 1948, and the index for Atlanta advanced only 4.8 percent. According to the wholesale price index of the Bureau of Labor Statistics, between June 1947 and June this year lumber prices advanced 18 percent, and prices of all building materials increased 13 percent. Although lumber production at Southern mills seems to be somewhat greater than it was a year ago, neither

Sixth District Statistics

INSTALMENT CASH LOANS

Lenders	No. of Lenders Reporting	VOLUME: Percent Change July 1948 from June 1948	VOLUME: Percent Change July 1948 from July 1947	OUTSTANDINGS: Percent Change July 1948 from June 1948	OUTSTANDINGS: Percent Change July 1948 from July 1947
Federal credit unions	41	— 6	+ 40	+ 3	+ 51
State credit unions	24	+ 4	+ 50	+ 7	+ 49
Industrial banking companies	10	+ 0	+ 18	+ 1	+ 11
Industrial loan companies	19	+ 2	+ 10	— 10	+ 8
Small loan companies	43	+ 1	+ 3	— 0	+ 8
Commercial banks	34	— 3	+ 14	+ 2	+ 42

RETAIL JEWELRY STORE OPERATIONS

Item	Number of Stores Reporting	Percent Change July 1948 from June 1948	Percent Change July 1948 from July 1947
Total sales	38	— 14	+ 2
Cash sales	38	— 16	— 17
Credit sales	38	— 13	+ 18
Accounts receivable, end of month	37	— 3	+ 41
Collections during month	37	+ 6	+ 19

WHOLESALE SALES AND INVENTORIES*

Item	SALES: No. of Firms Reporting	SALES: Percent Change July 1948 from June 1948	SALES: Percent Change July 1948 from July 1947	INVENTORIES: No. of Firms Reporting	INVENTORIES: Percent Change July 31, 1948, from June 30 1948	INVENTORIES: Percent Change July 31, 1948, from July 31 1947
Automotive supplies	7	— 4	— 3	5	+ 5	+ 7
Electrical group						
Wiring supplies	6	+ 7	+ 13	5	+ 7	+ 3
Appliances	5	— 4	+ 8	4	+ 0	+ 1
General hardware	7	— 5	+ 5	4	— 8	+ 9
Industrial hardware	3	— 14	+ 12	.	..	..
Jewelry	3	— 5	+ 18	3	+ 6	— 3
Plumbing and heating supplies	4	— 1	+ 15	3	— 8	+ 38
Confectionery	4	— 2	+ 12	.	..	..
Drugs and sundries	9	+ 6	+ 7	4	— 0	+ 5
Dry goods	17	+ 9	— 2	11	+ 4	+ 13
Groceries						
Full lines	36	— 3	— 2	20	— 6	+ 12
Specialty lines	7	— 14	+ 0	5	+ 7	+ 7
Tobacco products	9	+ 2	+ 6	4	+ 13	+ 39
Miscellaneous	12	— 16	+ 12	13	+ 0	+ 17
Total	129	— 4	+ 4	81	— 1	+ 11

*Based on U. S. Department of Commerce figures

DEPARTMENT STORE SALES AND INVENTORIES

Place	SALES: No. of Stores Reporting	SALES: Percent Change July 1948 from June 1948	SALES: Percent Change July 1948 from July 1947	INVENTORIES: No. of Stores Reporting	INVENTORIES: Percent Change July 31, 1948 from June 30 1948	INVENTORIES: Percent Change July 31, 1948 from July 31 1947
ALABAMA						
Birmingham	4	+ 1	+ 30	3	— 0	+ 28
Mobile	5	— 2	+ 13	.	..	..
Montgomery	3	— 0	+ 19	3	— 8	+ 19
FLORIDA						
Jacksonville	4	— 5	+ 5	3	— 7	+ 21
Miami	4	— 9	+ 10	3	— 13	+ 26
Orlando	3	— 9	+ 43	.	..	..
Tampa	5	— 13	+ 14	3	— 2	+ 27
GEORGIA						
Atlanta	6	— 7	+ 3	5	+ 1	+ 17
Augusta	4	— 12	+ 13	3	+ 30	+ 37
Columbus	3	— 7	+ 27	.	..	..
Macon	4	— 12	+ 8	4	+ 6	— 6
Rome	3	0	+ 20	.	..	..
Savannah	3	+ 2	+ 21	.	..	..
LOUISIANA						
Baton Rouge	4	+ 3	+ 14	4	— 0	+ 39
New Orleans	5	— 6	+ 17	4	— 3	+ 27
MISSISSIPPI						
Jackson	4	— 11	+ 8	4	+ 5	+ 35
Meridian	3	+ 8	+ 7	.	..	..
TENNESSEE						
Bristol	3	— 11	+ 18	3	+ 3	+ 10
Chattanooga	4	— 5	+ 26	3	— 17	+ 13
Knoxville	4	— 4	+ 45	.	..	..
Nashville	6	— 21	+ 8	5	+ 2	+ 23
OTHER CITIES*	19	— 0	+ 13	22	+ 0	+ 22
DISTRICT	103	— 7	+ 15	72	— 1	+ 23

*When fewer than three stores report in a given city, the sales or stocks are grouped together under "other cities."

Sixth District Statistics

CONDITION OF 28 MEMBER BANKS IN SELECTED CITIES
(In Thousands of Dollars)

Item	Aug. 18 1948	July 21 1948	Aug. 20 1947	Percent Change Aug. 18, 1948, from July 21 1948	Percent Change Aug. 18, 1948, from Aug. 20 1947
Loans and investments—Total	2,308,100	2,296,303	2,319,712	+ 1	— 0
Loans—total	801,989	810,429	723,686	— 1	+ 11
Commercial, industrial and agricultural loans	489,330	491,043	411,981	— 0	+ 19
Loans to brokers and dealers in securities	7,239	5,700	7,334	+ 27	— 1
Other loans for purchasing and carrying securities	55,414	58,886	80,482	— 6	— 31
Real estate loans	63,385	63,006	56,300	+ 1	+ 13
Loans to banks	4,963	6,855	5,121	— 28	— 3
Other loans	181,658	184,939	162,468	— 2	+ 12
Investments—total	1,513,488	1,493,201	1,596,026	+ 1	— 5
U. S. direct obligations	445,855	436,520	369,405	+ 2	+ 21
Obligations guaranteed by U. S.	876,707	868,816	1,035,034	+ 1	— 15
Other securities	190,926	187,865	191,587	+ 2	— 0
Reserve with F. R. Bank	433,060	418,445	438,716	+ 3	— 1
Cash in vault	41,883	44,547	39,881	— 6	+ 5
Balances with domestic banks	192,429	173,962	183,020	+ 11	+ 5
Demand deposits adjusted	1,765,582	1,755,517	1,767,032	+ 1	— 0
Time deposits	535,078	538,194	547,161	— 1	— 2
U. S. Gov't deposits	41,852	40,101	32,241	+ 4	+ 30
Deposits of domestic banks	455,422	422,599	468,803	+ 8	— 3
Borrowings	7,450	5,500	5,000	+ 35	+ 49

DEBITS TO INDIVIDUAL BANK ACCOUNTS
(In Thousands of Dollars)

Place	No. of Banks Reporting	July 1948	June 1948	July 1947	Percent Change July 1948 from June 1948	Percent Change July 1948 from July 1947
ALABAMA						
Anniston	3	19,349	20,167	17,273	— 4	+ 12
Birmingham	6	320,672	326,095	269,722	— 2	+ 19
Dothan	2	10,688	10,422	8,840	+ 3	+ 21
Gadsden	3	17,484	17,012	15,216	+ 3	+ 15
Mobile	5	153,890	140,743	125,213	+ 9	+ 23
Montgomery	3	64,963	65,535	61,750	— 1	+ 5
FLORIDA						
Jacksonville	3	264,456	257,965	223,020	+ 3	+ 19
Miami	7	231,467	238,152	195,464	— 3	+ 18
Greater Miami*	13	315,249	320,237	263,188	— 2	+ 20
Orlando	3	47,780	48,623	38,523	— 2	+ 24
Pensacola	3	34,256	32,001	30,121	+ 7	+ 14
St. Petersburg	3	48,673	49,597	42,496	— 2	+ 15
Tampa	3	98,616	102,927	93,689	— 4	+ 5
GEORGIA						
Albany	2	16,304	15,756	13,426	+ 3	+ 21
Atlanta	4	780,417	794,887	703,565	— 2	+ 11
Augusta	3	53,997	52,708	48,092	+ 2	+ 12
Brunswick	2	9,491	9,812	8,308	— 3	+ 14
Columbus	4	41,062	52,630	53,236	— 22	— 23
Elberton	2	3,558	3,643	3,136	— 2	+ 13
Gainesville*	3	14,362	13,565	11,955	+ 6	+ 20
Griffin*	2	10,639	10,541	9,138	+ 1	+ 16
Macon	3	58,575	60,284	56,894	— 3	+ 3
Newnan	2	8,566	7,864	8,935	+ 9	— 4
Rome*	3	20,404	19,340	17,398	+ 5	+ 17
Savannah	4	105,113	91,295	82,005	+ 15	+ 28
Valdosta	2	17,737	11,315	12,527	+ 57	+ 42
LOUISIANA						
Baton Rouge	3	94,407	88,624	79,381	+ 7	+ 19
Lake Charles	3	34,674	32,882	25,912	+ 5	+ 34
New Orleans	7	646,360	618,744	569,891	+ 5	+ 13
MISSISSIPPI						
Hattiesburg	2	16,288	14,961	14,524	+ 9	+ 12
Jackson	4	125,410	122,301	100,335	+ 3	+ 25
Meridian	3	27,527	26,675	23,181	+ 3	+ 19
Vicksburg	2	22,634	23,086	19,458	— 2	+ 16
TENNESSEE						
Chattanooga	4	128,124	140,919	126,179	— 9	+ 2
Knoxville	4	113,003	109,645	101,219	+ 3	+ 12
Nashville	6	300,731	303,516	265,789	— 1	+ 13
SIXTH DISTRICT 32 Cities	110	3,916,572	3,890,786	3,437,320	+ 1	+ 14
UNITED STATES 333 Cities		102,942,000	108,629,000	93,740,000	— 5	+ 10

*Not included in Sixth District total

producers nor distributors appear willing to accumulate inventories at present prices.

Residential building accounted for 44 percent of the January-June total, both this year and in 1947, and other contracts accounted for 56 percent. Both classes of awards were half again as large this year as they were in that period last year. Five states shared in the increase in total awards. The one exception was Mississippi, where awards were down 12 percent. Increases in the other five states ranged from 29 percent in Alabama to 101 percent in Louisiana. Florida had the largest dollar volume for the period, and this volume accounted for 39 percent of the District total. For the month of June both residential and other awards were about the same as they were for May, but residential contracts were 71 percent greater than in June last year, and other awards were up 40 percent. The June increase over that month last year was shared by all of the six states in the District.

Employment in the District's manufacturing industries declined again in June by a small fraction of one percent. There has been a similar occurrence each month since January, but for the entire five months the decrease has amounted to less than 2 percent. June increases in Alabama, Georgia, and Louisiana were offset by declines in Florida, Mississippi, and Tennessee. There were increases in employment at blast furnaces and at sawmills and planing mills in Alabama, but continued decreases at shipbuilding establishments and fertilizer factories. The decline in Florida reflects principally the end of the citrus season and a reduction at shipbuilding and repair plants. The increase in Georgia was largely in the food- and lumber-products groups, and that in Louisiana was due to small gains in a variety of classifications. In all the District states except Mississippi manufacturing employment was greater than it was a year ago. Employment in construction increased further in June in all areas except Miami, where there was a reduction due to the completion of numerous building projects.

As was to be expected, textile-mill activity declined in July, the last month of the cotton year and the time when mills usually close for a vacation period. July consumption of cotton by mills in this district was 5 percent less than it was in July last year and it was at the lowest level in about eight years. In the 12 months of the cotton year, August through July, the District mills used 3,285,285 bales of cotton, a decrease of 10 percent compared with consumption in the previous cotton year. Tennessee mills used nearly as much cotton as they did the year before, but consumption at Georgia mills declined 9 percent, and there were also decreases of 13 percent in Alabama and 20 percent in Mississippi.

Steel-mill operations in the Birmingham-Gadsden area have held at slightly above their rated capacity since the middle of May, when they recovered from the effects of the March-April strike in the coal mines. Coal production in July was down from June because of idleness at the mines early in the month, but it was well above output in July last year.

Electric-power production in this district in June recovered only a part of the May decrease but was 17 percent greater than it was in June last year. A further decrease in June at hydroelectric plants, caused by continued dry weather, was a little more than offset by an increase at plants using fuels. In June only 40 percent of total production was by plants using water power. At plants using fuels, output was 29 percent greater than it was in June last year; but at those plants that produce their current from water power, June production was only 3 percent above that in June 1947. D. E. M.