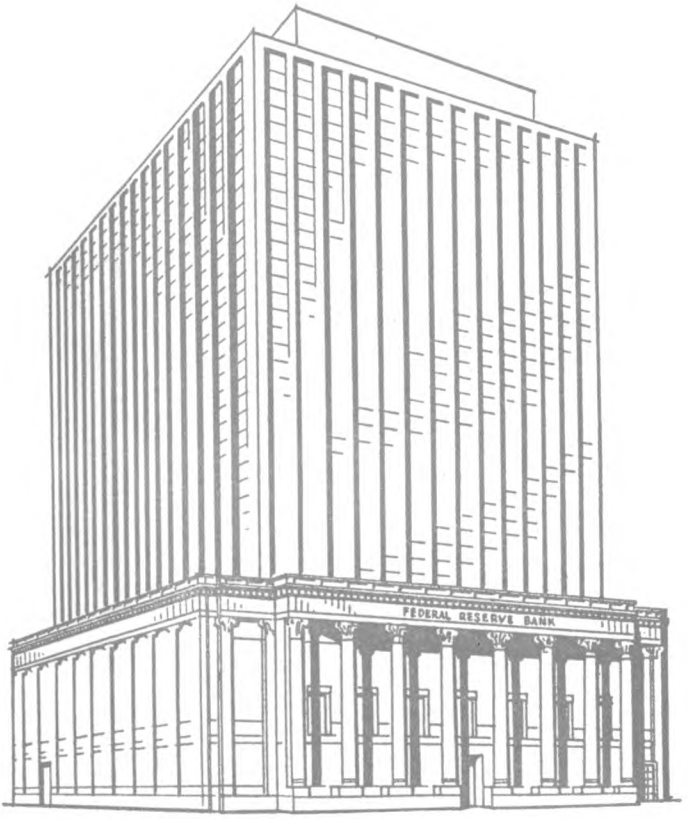
ANNUAL STATEMENT 1956



FEDERAL RESERVE BANK OF MINNEAPOLIS

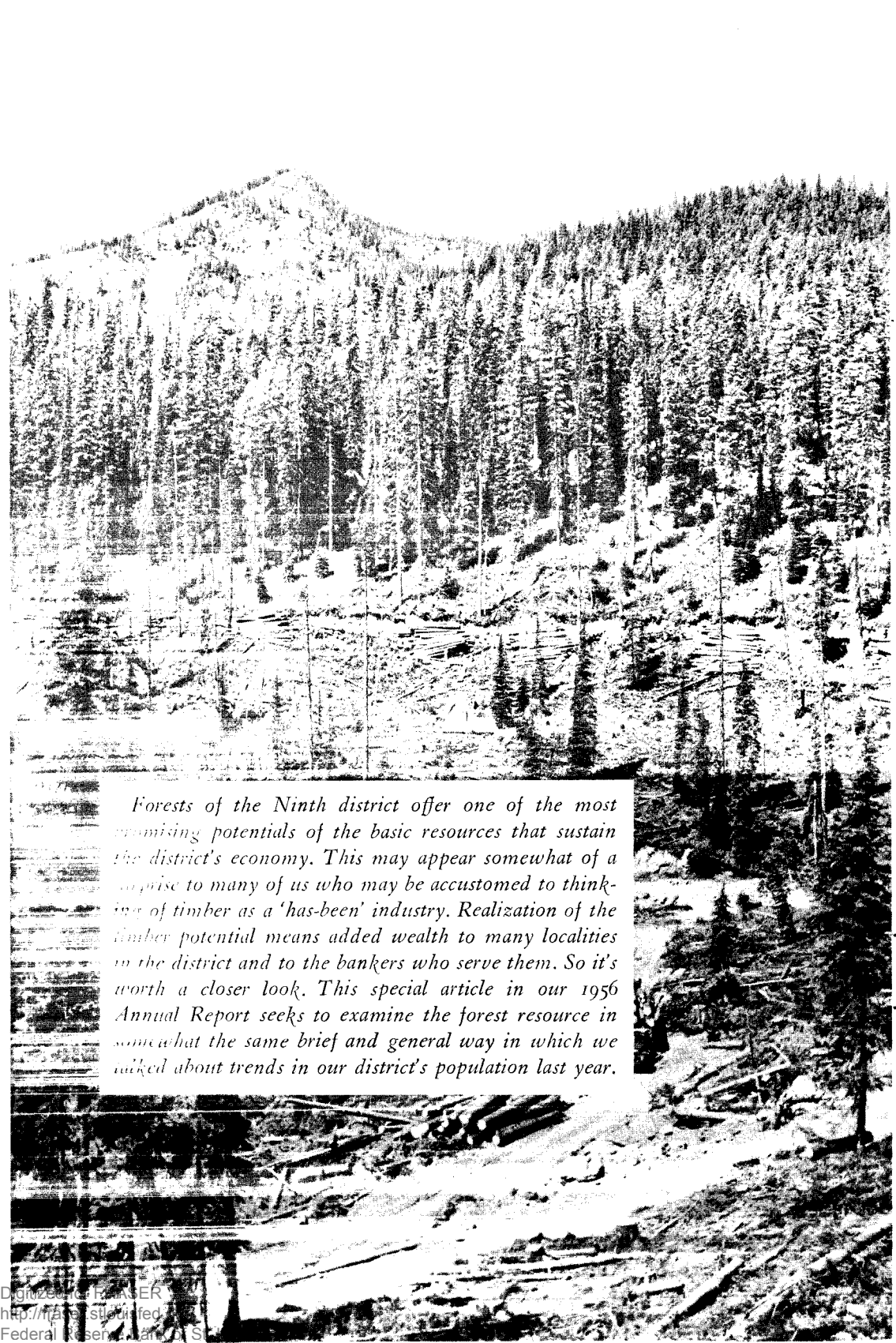
FOREWORD

It is a pleasure to transmit herewith the 1956 Annual Report of this bank. The bank has had a successful year with a growing volume of operations. In addition, the head office building expansion program has gone along without delays, and at the close of the year the building was nearing the end of its remodeling and expansion program.

In this report, as in those of the past several years, it is a pleasure to review the developments in one of the district's important industries. This year attention is focused on the forest industry.

Leslie N. Perrin
Chairman of the Board

O. S. Powell
President



Forests of the Ninth district offer one of the most promising potentials of the basic resources that sustain the district's economy. This may appear somewhat of a surprise to many of us who may be accustomed to thinking of timber as a 'has-been' industry. Realization of the timber potential means added wealth to many localities in the district and to the bankers who serve them. So it's worth a closer look. This special article in our 1956 Annual Report seeks to examine the forest resource in somewhat the same brief and general way in which we talked about trends in our district's population last year.

Assets grow in 'timber bank'

Forests of the Ninth district are an important basis for industry today. With material demands of our national economy constantly growing, the forest resource, renewable by nature, promises an even greater contribution to the future.

As resources go, timber has a pleasant twist. Given enough time it will, like a savings account, replenish itself. In the 'timber bank,' we can collect a return on our savings, the 'timber bank' being, of course, an analogy between our favorite form of enterprise, the bank, and timber growing. Suppose we sketch out this analogy just a bit. Let the *savings account* be represented by forest land . . . land with soils and characteristic climate best suited to forest growth. About one-fifth of the land area of our district qualifies under this heading—over 50 million acres. The living trees invested in the account are *principal* and the net annual growth would represent *interest* earnings.

You might even figure out an *interest rate*. As a rough estimate of the rate of return, lumping all species together, there is about 33 billion cubic feet of timber in live trees of marketable size* in our district. The net annual growth of wood in forests in this district is roughly 980 million cubic feet. Hence the annual rate of return is a shade under 3 percent on the principal.

There is one other point we want to make before we leave the savings account analogy. That concerns the way we withdraw funds. If we withdraw more each year than is added in interest, we soon eat up our principal. On the other hand, suppose we want a perpetual income. Then we had best withdraw only the interest earnings each year — leaving the principal intact to maintain earning power in future years.

This is the real difference between using a self-replenishing resource like timber as an investment and using it simply as a wasting asset—

*Greater than five inches diameter at breast height.

LOGGING SAWTIMBER IN WESTERN MONTANA

sort of a storehouse to be tapped until it's empty. One of the problems in parts of our district is that in the past we used up much of our principal—and we are still using it up in the case of our most-prized types of timber; eg., the white, red and yellow pines. The real challenge is to build up the principal until the annual interest will take care of our needs. Unless demands get out of hand, this is a realistic goal on a regional scale.

The return we get from our forest capital refuses to behave in the simple fashion of interest on savings deposits or investment. Nature pays a variable scale of returns on trees. When trees are very young, the annual return is small. As a matter of fact, for a long time, until a tree gets to five or six inches in diameter, it represents little more to the timber grower than a skeleton on which to hang next year's growth of wood. Return is highest when trees begin to approach their ultimate size, because growth is added immediately under the bark, encircling completely all previous growth. It's a case of geometry: the bigger the tree, the more can be added.

Once trees have passed maturity, however, compounding of interest breaks down. The annual return may drop to nothing. Therefore, in order to get the maximum return from forest holdings, it is necessary not only to have an adequate number of trees for the site but also to have a stand properly balanced between different age groups so that an optimum proportion of them are in their most productive years. Not only might the interest realized drop to zero if the capital is allowed to become too old, but decay resulting from age may actually erode the capital. In such a situation, the net return is negative.

To get down to cases we can see the effects of overmature forest stands right within our own district. Look at the following table which gives some figures for softwood timber for two of our states with important timber areas:

	Montana	Minnesota
ACREAGE—millions of acres of commercial forest in softwoods	15.1	6.8
VOLUME—millions of board feet of live softwood sawtimber	55,100	5,000
GROWTH—millions of board feet net annual growth of softwood sawtimber.	229	328

Source: U. S. Forest Service

A glance at the table will show you that Montana forests, with twice the acreage and 11 times the wood volume of Minnesota's softwood stands, add only two-thirds as much sawtimber growth annually as do the forests of Minnesota. Surprising? Not really. Much of Montana's timber is 'too old.' The younger Minnesota timber, while rather spotty as a sawtimber supply, is growing much more rapidly than the Montana timber.

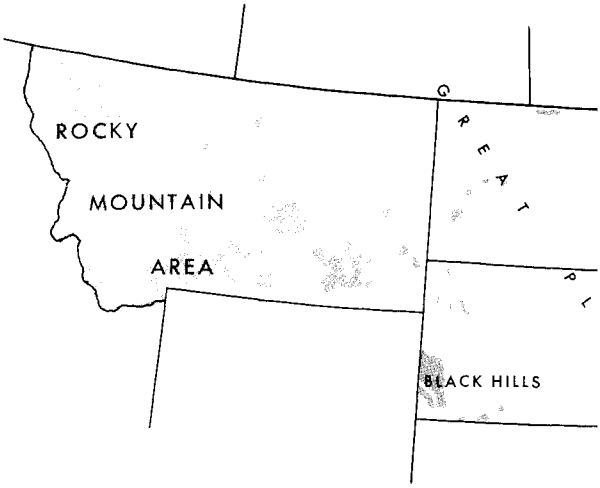
Then, of course, the timber bank has its 'bank robbers.' These are the natural (or unnatural) factors that may make the capital disappear right before our eyes. Fire is one,

PULPWOOD CUT, NORTHERN MINNESOTA

of course, but a surprisingly minor one. Only a fraction of 1 percent of our commercial forest land is burned in a typical year. Other factors—insects, diseases—are far more significant. Insects have their greatest relative impact in the western part of our district, while diseases (fungus-caused rots and cankers) are the major single cause of tree mortality in the eastern part of the district.

These predators don't go in for a simple case of robbery of our timber. Only rarely is the principal destroyed. Even in the wake of forest fire, much sound and salvageable wood may remain in a dead tree. Of course, if the tree is killed, that puts a stop to collecting annual interest.

Insects frequently kill a tree outright. Take the case of *dendroctonus engelmanni*. More people know the creature as the spruce bark beetle, an insect less than half as long as a man's thumbnail, which since 1950 had laid to rest 2 billion board feet of live and growing spruce in the western Montana area. A goodly



Nearly all conifers; elevation 3000' to 7000'; terrain generally hilly to mountainous

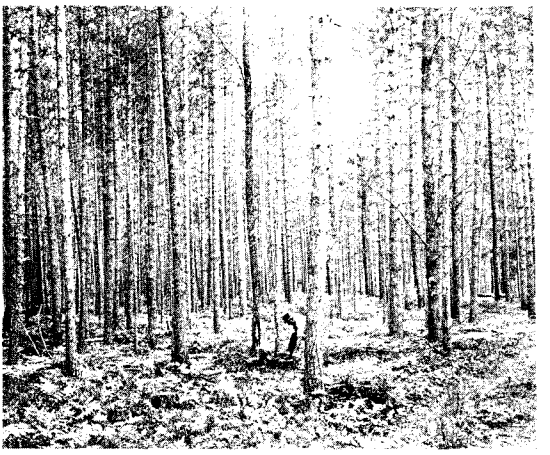
CHART 1, MAJOR COMMERCIAL FOREST AREAS

share of this bug-killed timber has been salvaged, thanks to one of the most concerted large-scale programs of road building, wood salvage, and promotional selling in recent times —but that's a story in itself.

Worse yet is the typical effect of tree disease. Disease may not kill our trees, but may leave us with a stand of sickly, slow-growing trees that would be more like a bank full of assets that earn practically no return. Of course, such a situation could cumulatively rob us of a great deal of wood growth over a period of many years. The Forest Service has attempted to evaluate this type of loss (they call it *growth impact)* and finds it to be an even greater destroyer of forest wealth than the outright killing of trees.

This pilfering of capital and pinching-off of the interest goes on all the time in the timber bank—though seldom as dramatically and thoroughly as the spruce bark beetle invasion.

There are a multitude of further complexities affecting timber as an earning account. We've scarcely scratched the surface in our consideration of them. But in our year-end stock-taking for this annual report, we've got to get down to cases and look at the situation in our district. Not only has there been expansion within existing forest industries here, but a number of substantial new plants to utilize wood supply have been announced in the past year. Forestry is a particularly timely subject since the U. S. Forest Service has released in preliminary form its *Timber Resources Review.* This study gives us a wealth of information on the present status and future prospects of timber growth. Some of



Mixed conifers and hardwoods (mostly hardwoods); elevation 600' to 2000'; terrain generally level to hilly

this data is summarized in table 1 (see page 12).

TWO BROAD AREAS PRESENT SHARP CONTRASTS

There are two broad forest regions in our district. Each of these provides a most instructive contrast, since the problems and potentials of each are quite different. These are forests which are roughly defined as occupying the western and eastern extremities of our district. They are separated by the vast natural prairie of the northern Great Plains. The major commercial forest stands are shown on the map of chart 1 (pp. 6, 7).

Let's look at the eastern region first—historically the first area to receive extensive cutting. The eastern forest area of the Ninth district, the shaded area on chart 1, runs 75 to 80 percent forested. Altitudes are less than 2,000 feet, with generally slight relief; rainfall 20 to 40 inches a year, with the average frost-free growing season on the order of 100 days . . . more in the south, less in the north. As an area it is a heavy exporter of wood to points south in central Wisconsin and lower Michigan. It stocks a majority of the commercial forest land in the three-state region which the industry and the U. S. Forest Service refer to as the Lake States. Today it is a region of second growth forests, interspersed with hardwoods and softwoods. Hardwoods such as birch, aspen, maple and oak predominate. A hundred years ago the forests of the Lake States covered twice the area they do now—then the land was graced with vast stands of sawtimber-size

softwood trees including white pine, red pine, spruce and balsam fir.

There are differences from place to place within the eastern part of the district. For example, Upper Michigan has some good stands of hardwood sawtimber. As a matter of fact, probably the best concentration of old stock hardwood sawtimber in one area in the Lake States is found in Upper Michigan. A substantial share of the region's softwood forests are concentrated in northern Minnesota. These intraregional differences cast a slightly different light on the industries, problems and prospects from one locality to the other.

The region's forestry background is a story of extensive cutting, destructive burning, and of unwise clearing for farm land in many areas which later were demonstrated to be incapable of supporting profitable agricultural enterprise. Between the mid-1800's and the first decade of the 1900's, large parts of these forests were liquidated for lumber, leaving a cutover area that presented many economic problems in the ensuing decades. The drastic inroads made on the forest resource many decades ago has markedly changed the role and importance of forests in the regional economy today.

According to Forest Service estimates, sawtimber stands remaining in the Lake States contain only about 5 percent of the original sawtimber volume. (Sawtimber trees are those whose diameter at breast height is greater than about 10 inches.) Furthermore, only a third of the existing sawtimber is of the quality which will make standard lumber. Total cut of sawtimber from the Lake States, which reached nearly 10 billion board feet annually at one time, is now down to less than 1 billion out of a total national cut of some 75 billion board feet (1952 figures from U. S. Forest Service).

Pulpwood leads in eastern forests

Today with only 12 percent of the commercial forest land of the Lake States stocked with sawtimber and with much of this of inferior quality, the supply of wood for lumber is only a minor part of industrial forest use. The number of large sawmills today is but a fraction of what it was years ago. In Minnesota, for example, the largest active sawmill cuts only about 5 million board feet annually. That places it only midway in the conventional *medium-size* category which runs from 1 million to 10 million board feet annually.

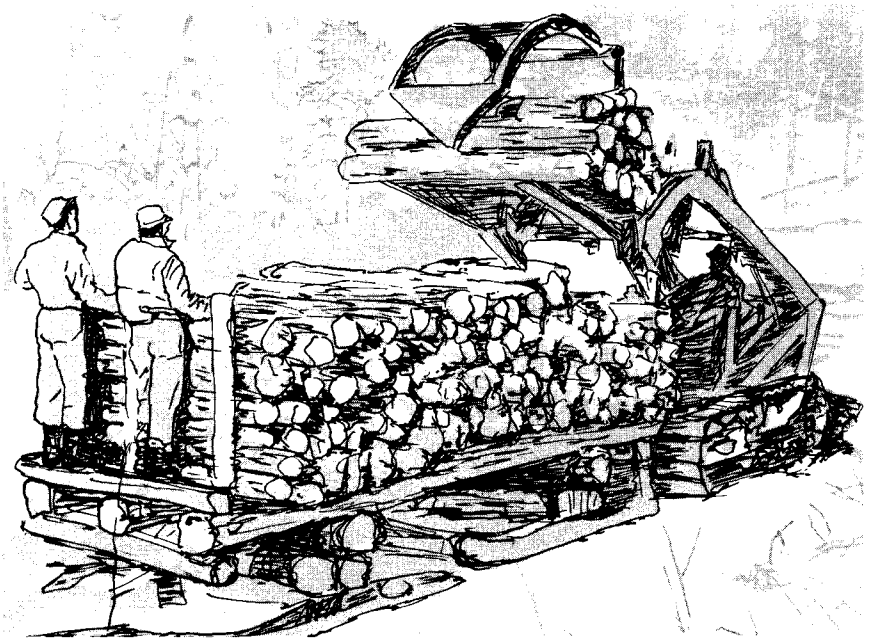
The most significant, in fact the dominant enterprise that forests of the eastern part of our district support is the pulp and paper industry. It consumes by far the greatest portion of the softwood trees cut in the region — and from current signs it may not be long until pulp mills will be taking the greatest share of the hardwoods, too. The total net drain of all species from cutting in the Lake States in 1952 was 541 million cubic feet. By major use these break down:

Sawlogs and sawbolts	195 million cu. ft.
Pulpwood	183 million cu. ft.
Fuelwood	104 million cu. ft.
All other uses	59 million cu. ft.

Minnesota's cut is even more heavily weighted for pulpwood. Half the cubic volume cut goes for pulping. Currently, above 880,000 cords or roughly 9 million trees are cut annually for pulpwood in the state.

Pulp and paper is the key industry in forest utilization today and will be for many years in the future. Most significant is the fact that much more pulpwood is added by growth in the region each year than is cut for use, though not necessarily of the species most used in the past. The annual harvest could be expanded considerably. These prospects are the subject of a study, *Pulp and paper in the upper lakes region,* published by the bank last year. (All who are interested are invited to write us for a copy.)

The point is clear, particularly taken in comparison with data from the western part of our district, that the bulk of the output of our eastern forests is still small stuff growthwise, and much of it in what have been traditionally considered inferior species. The bread-and-butter product is pulpwood. Yet sawtimber production is a goal of most forest management programs—even here in the none-too-well stocked second growth forests of the Lake States. Sawtimber is a more valuable product than pulpwood on a dollars per unit volume basis. But don't get the mistaken idea it's an either-or proposition.



MECHANIZED PULPWOOD LOADING

Both pulpwood and sawtimber, and for that matter poles, firewood, posts, Christmas trees and many other products can be complementary crops from the same forest tract at various stages of its growth cycle. In spite of the prominence of pulpwood in this region today, sawtimber is the natural end-crop of any managed forest. Whether or not we can begin to realize anything near the economic return our forest land is capable of giving us, depends directly on the success of those who own and harvest these forests in upgrading the quality and quantity of sawtimber yield.

The plain fact is that we can't be any too complacent about our progress in the direction of realizing maximum return from our forests. The volume of our most valuable softwoods actually has been reduced over the past 20 years. Yet forestry authorities are quick to point out a number of encouraging signs.

First, recent surveys have shown that the total timber volume in the eastern part of our district is not only up over that of two decades back, but the stands in which it occurs are generally thicker—there is more merchantable wood per acre. From the human side there is the fact that progress has been made in forest management. And too, ownership is more stable. The rising importance of pulpwood underlines the

great potential for further use of hardwoods to expand output of the regionally important pulp and paper industry. There is a great surplus of hardwoods. Some localities even have local surpluses of softwoods suitable for pulpwood. For example, in a three-county area of northeastern Minnesota an estimated 170,000 cords of surplus softwoods of pulping species (balsam fir, black and white spruce, and jack pine) are available annually.

Problem: small holdings

Well, it's clear that things are looking up. Forest authorities assure us timber output could be greatly enlarged if some of the challenging problems that face the forest industry could be met. Perhaps chief among these problems is the fact that the small timber owner does not have sufficient incentive to manage his holdings as they should be managed for maximum long-run gain. In fact he is typically under strong temptation to liquidate his holdings long before they have contributed their greatest return. Most other classes of holders are doing pretty well in the task of husbanding their forest holdings. But the small forest owners, including the farmer, because of the great share of total commercial forest land which they in aggregate hold, are really the key to future improvement.

In the Lake States nearly 16 million acres of commercial forest land are held in ownerships of less than 100 acres. In Wisconsin 9½ million acres—over half the total commercial forest land—are in private ownerships of less than 500 acres. (In Montana, on the other hand, with roughly the same amount of commercial forest land, ownerships of that size aggregate only about 1 million acres.)

The root of the problem is the simple biological fact that it takes perhaps twice as long to carry out a complete cycle of timber crops as the length of the average man's productive life. In spite of the inherent difficulty of this problem there is evidence that interest in small forest holdings in this sector of our district is on the upswing. Increasing dollar value of forest land and of forest growths of all grades is the long-term outlook. This should serve as strongly as any conceivable factor to interest many small land owners in the business potential of forest holdings. The problem of adequate profit incentives for small-tract timber operators is only partially solved. Many programs of assistance have been developed by government and industry, and added emphasis on the problem seems inevitable. The outlook now appears more hopeful than ever.

Problem: deforested areas

Another major challenge is that large areas of our eastern forest land remain nonstocked or poorly productive. The Lake States show very poorly among regions of the country in terms of acreage of nonstocked

forest land. Minnesota alone has over 10 percent of the total nonstocked or poorly stocked commercial forest land in the United States, according to U. S. Forest Service statistics. Some authorities feel that a stepped-up planting program is needed to overcome this situation. However, not all nonstocked land is suitable for planting. Since planting is expensive, it is far preferable to let nature reseed whenever feasible.

In Wisconsin a county-by-county forest inventory which has now been published for 12 of 16 forested Ninth district counties reveals some interesting facts on plantable acreages. The total commercial forest land of these counties is 5.6 million acres of which nearly 2.3 million acres are understocked or nonstocked. Of the 2.3 million acres deficient in trees, about one third (845,000 acres) is restocking naturally and about one fifth (455,000 acres) is suitable for replanting. The remainder is unsuitable for planting. Only about a fourth of the plantable acreage could be handled by machine planting methods.

This particular challenge of bringing about adequate stocking of large areas of the region's forest land is felt to offer one of the best possibilities for increasing wood supply.

TABLE 1—SELECTED FOREST STATISTICS FOR NINTH DISTRICT STATES

FOREST AREA	Mont.	S. Dakota (west)	Minn.	Wis.	Mich.	
Total commercial forest	**15,727**	**1,266**	**18,098**	**16,325**	**18,849**	**Thousands of acres**
percent in sawtimber	36%	52%	11%	12%	14%	
percent in holdings of less than 100 acres	2%	32%	23%	39%	28%	
SAWTIMBER VOLUME AND GROWTH						
Total volume live sawtimber	**55,770**	**3,167**	**12,538**	**16,111**	**21,141**	**Million board ft.**
softwood	55,075	3,167	5,039	3,847	5,469	
hardwood	695	.....	7,499	12,264	15,672	
Net annual growth 1952	**247**	**61**	**788**	**895**	**1,010**	
softwood	229	61	328	187	287	
hardwood	18	.....	460	708	723	
GROWTH, CUT, MORTALITY ALL TIMBER						
Gross annual growth	295	30	558	538	569	**Million cu. ft.**
Mortality	123	4	173	176	136	
Net annual growth 1952	**172**	**26**	**385**	**362**	**433**	
Annual total cut 1952	118	8.5	148	174	216	
CAUSES OF MORTALITY						
By fire	1.6%	.....	0.6%	.....	0.7%	**Percent**
By insects	61%	25%	8%	4%	10%	
By diseases	5%	.....	40%	31%	32%	
By other causes*	32%	75%	51%	65%	58%	

*Weather, animals, suppression, etc.

Source: **Timber Resources Review,** U. S. Forest Service, Preliminary draft.

Significant gains possible

Among other problems we might briefly mention is the challenge of upgrading the general low quality of these eastern forests. Also, the still-dangerous destructive potential of forest insects and diseases deserves and is receiving a lot of attention. Through concerted efforts to solve these problems the volume of wood products yielded by the eastern forest land in our district could be doubled. Necessarily, a long period of adjustment would be required.

However, an important point for us today is that we don't have to think in terms of several decades to realize gains from our forests. Improved management practices if undertaken immediately on a wide scale could jump our annual timber growth by as much as one-fourth in very short order. Even more immediate than this is the fact that a lot of wood growth—particularly hardwoods—is going unused today. This surplus material offers an important potential for increased industrial use.

Events of 1956 demonstrated that industry growth based on forest materials is still active in the Lake States section. Examples include the following: At L'Anse in Upper Michigan, Celotex Corporation began construction of a $6.5 million mill to utilize an abundant northern hardwood supply for the manufacture of fiber board and related products. The new plant will create several hundred jobs. In Minnesota, late in 1956, the Northwest Paper Company announced an expansion program at its paper mills in the northern part of the state. This particular program, costing about $5 million and resulting in 200 new jobs, will provide 150 tons a day of additional paper output. Other paper companies have also initiated or continued substantial expansion programs.

We can summarize these thoughts neatly enough by recognizing that our eastern forests have much untapped potential for timber production, and if fairly treated they can, over a period of time, contribute increasingly to the economic prosperity of this region. Now let's turn west.

SPRUCE STAND IN MONTANA

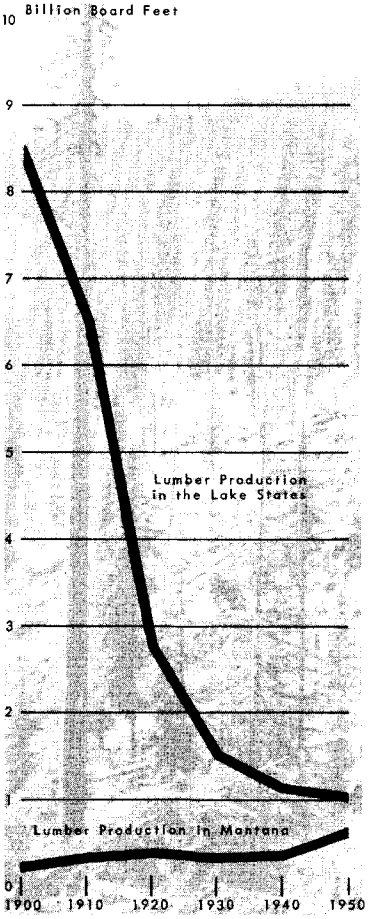
FORESTS OF THE WEST

The western part of our district contains about half as much forest land as do the stretches in the eastern part bordering Lake Superior, and the forest scene is of sharply different complexion. Rainfall drops off as we go westward, from the 30 inch annual average in the Lake States forest areas to 15 inches or less on crossing the Dakotas and entering Montana. Beyond the plains, we reach scattered areas of higher elevation where loss by evaporation is less than in the plains and rainfall may be more.

Our western forests occur in broad stretches from the Idaho border on the west through the Black Hills of South Dakota, typically at high altitudes and in mountainous or hilly country. Most timber here is associated with the Rocky Mountain system, which supports substantial forests of western softwood at elevations from 3,000 to 7,000 feet. Toward the east this forest is restricted to the higher elevations, while west of the continental divide, in Montana, forests reach in to the valley floors. In acreage terms Montana has 15.7 million acres of commercial forest land; in the Black Hills of South Dakota there are another 1.3 million acres.

Softwoods far outnumber the hardwoods and are for practical purposes the sole commercial timber source. By species about half of Montana's sawtimber is either larch or douglas-fir, while ponderosa pine, lodgepole pine and spruce are also important. South Dakota's commercial softwood timber is almost entirely ponderosa pine. Forests are typically densest and fastest growing toward the west —similarly the best sawtimber is located there. Over two-thirds of the sawtimber in the western Ninth district is located west of the continental divide in Montana, though but a small fraction of the gross land area

CHART 2, TRENDS IN LUMBER OUTPUT



lies west of the divide. Generalized location of commercial forest land in the western part of our district is mapped in chart 1.

Sawtimber dominates cutting

In Montana and South Dakota sawtimber for lumber manufacture is by far the dominant use of the forest harvest. For example, timber production in Montana during the years 1939-48 averaged as follows:

Total timber output	**90.0 million cu. ft.**
for sawlogs & sawbolts	61.4 million cu. ft.
for fuelwood	16.1 million cu. ft.
for pulpwood	1.2 million cu. ft.
all other uses	11.3 million cu. ft.

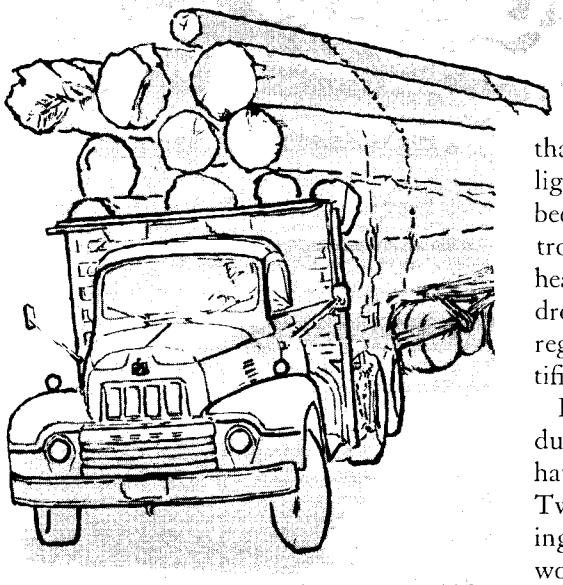
The reason is that much more sawtimber is to be found in the western forests of our district. In fact, there are many overmature stands that hold virgin timber.

Timber industries rank high in importance among manufacturing enterprises in the western part of the district. Employment in the lumber and wood products industries in Montana accounts for nearly one-third of total employment in manufacturing industries in the state, according to the 1954 Census of Business. In northwestern Montana the dominance of the industry is far greater even than this surprising figure. Capital expenditures by the lumber and wood products industries in Montana during the year 1954 were two or three times as large as those in Minnesota.

Lumber production in Montana (though it's had its ups and downs) has shown a general historic trend upward as is illustrated in chart 2. Large-size sawmills have declined in number and output since 1921, while medium sized sawmills (1 million to 10 million board feet annually) have shown a great increase in relative and absolute importance. Close to 90 mills of this size operate today. The two largest Montana mills are those of the J. Neils Company at Libby (recently purchased by St. Regis Paper Company) and of the Anaconda Company at Bonner. In the Black Hills there are two sawmills of 10 million feet annual capacity or larger, while the total capacity of all mills is about 70 million feet annually. Total sawmill capacity in the western part of our district is probably close to a billion board-feet annually.

Western forest has its problems, too

One feature that the western forests share with our eastern forests is that the actual growth of timber is far less than its ultimate potential. According to U. S. Forest Service estimates, the annual growth of sawtimber in Montana averages only 38 board feet per acre in contrast to a potential of 85 board feet per acre. This is largely the result of the fact that Montana has too much overstocked forest land (as well as a goodly share of sizes smaller than are tallied in the estimates). This situation accounts for the fact that the forests of Montana are adding less cubic volume to sawtimber stands annually than are the much smaller



acreages of softwoods in Minnesota. The major challenges to improving growth are distinctive and different from those of the east. Let's consider them briefly.

Problem: insects most destructive

Perhaps the chief problem is to counter those destructive forces that are now claiming over one-fourth of the gross timber growth in this region. Fire, while more of a problem than in the east because of the many lightning-caused mountain fires, has been fairly well brought under control. Forest service smoke jumpers, headquartered at Missoula, can be dropped in any remote area of the region within two hours after identification of a fire.

Insects, in contrast, favored by reduced vitality of overmature trees, have been highly destructive agents. Two general types of insects supplying the major threats are the budworm (which is susceptible to spraying) and the bark beetle (which is not). Because the relative dryness of many of these forest stands inhibits spore-carried organisms, diseases do not have the importance and destructive factor that they do in the Lake States. (As an example, there are vast stands of lodgepole pine, east of the Bitterroot valley in western Montana, killed by bark beetles in 1931-32, and still standing today, bleached and upright, though largely unaffected by decay.)

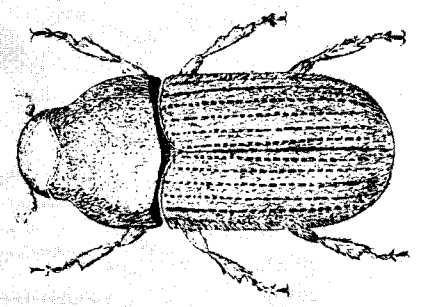
The best insurance against extensive loss from insect attack is an adequate road system that enables im-

mediate salvage of infested or killed timber. One of the prime objectives of the Forest Service during the spruce bark beetle epidemic of 1950-3 in western Montana was just that—to construct roads enabling loggers to salvage as much of the 2 billion feet of killed spruce as possible. Considerable progress has been made in the direction of an adequate forest road system in recent years. Comprehensive spraying programs have been carried out, also, where they could prove effective.

Then, too, there is the problem of bringing about a better age distribution . . . more stands in the most productive middle years. This can be done by planned cutting of extensive areas of old overmature forest and allowing them to be replaced over a period of time with vigorous young growth—preferably from the cost standpoint by natural seeding. As in the case of the Lake States, there are some areas that require replanting to insure their conversion to desirable forest land.

Problem: adjusting cutting to growth

Some species are overcut, particularly in western Montana. These include the most valuable species of sawtimber in western Montana, white pine and ponderosa pine. If future supplies of these species are not to be endangered by too rapid depletion of the present growing stock the cutting schedule will have

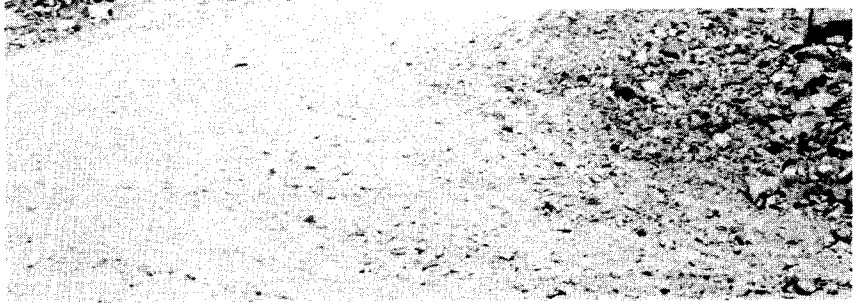


$12 MILLION ON ROADS TO UNDO ITS DIRTY WORK

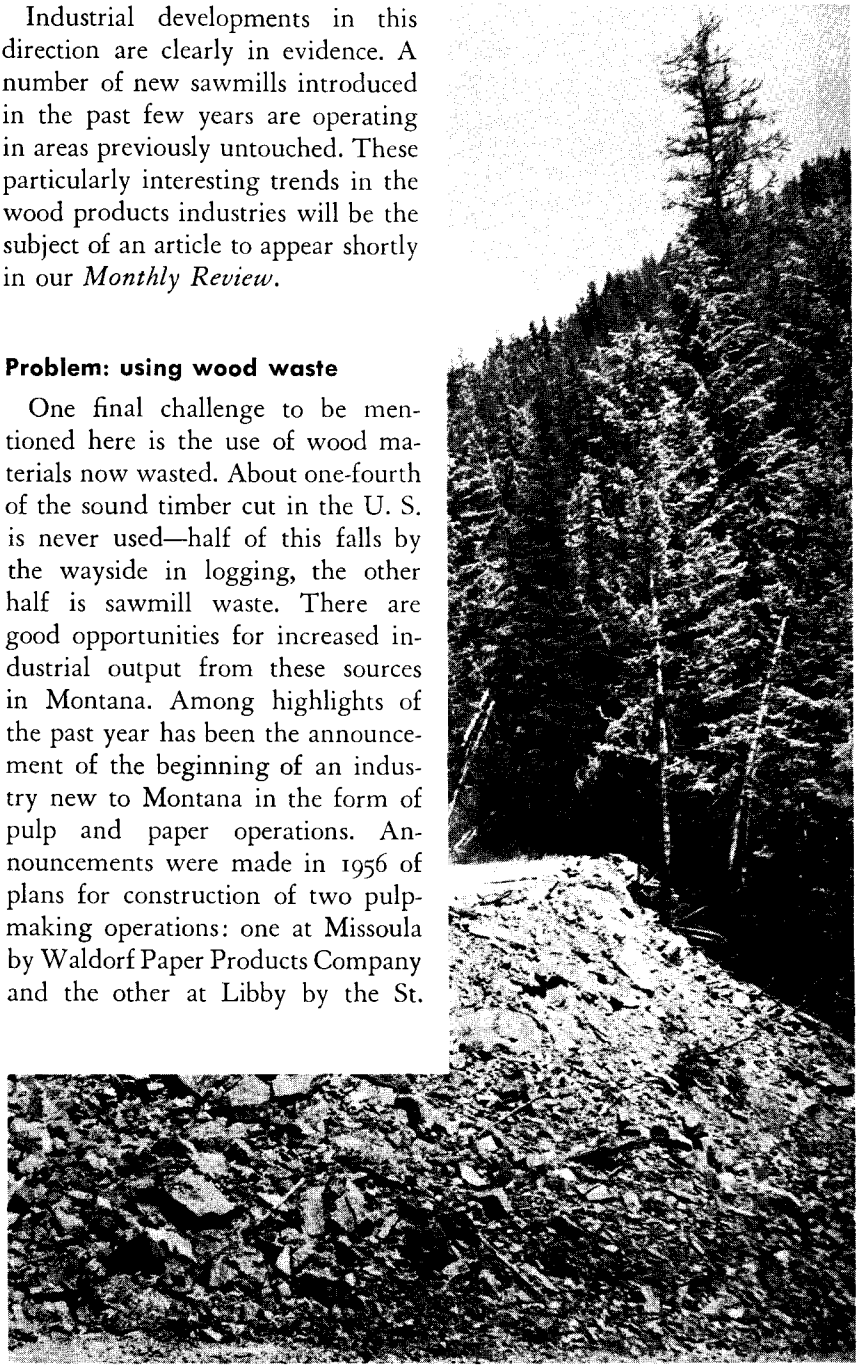
Windstorms caused heavy blowdowns of spruce stands in the northwestern Montana area in 1949-50. Great numbers of dead and fallen spruce trees became breeding grounds for the spruce bark beetle, and within four years, over 2 billion board-feet of spruce were killed by the insect's tunneling habits.

The only really effective control measure is removal of the infested timber. Lack of roads proved a major obstacle. In a sense the epidemic had one beneficial effect: twelve million dollars worth of public and private spending for road construction has provided needed avenues of access into some of the remote forest areas. Need for an adequate forest road system was emphasized by this costly bark beetle epidemic.

to be readjusted. The 1948 cut of ponderosa and white pine in Montana was 81 percent above the allowable cut—the drain was particularly heavy west of the continental divide. However, for most other species the amounts actually cut are far below the sustainable annual cut of material available. One of the biggest challenges lies in the use of much unused wood material. Particularly is this true for trees of poletimber size (5 inches to 11 inches in thickness at breast height). More extensive cuts of this material can and should be made now. Dead timber holds another large store of usable wood fibers. A cleanup problem of large proportions that stems from previous insect attacks is salvage of dead timber. An estimated 1.2 billion board feet of salvageable dead sawtimber are to be found today in the forests of Montana. In the abundant smaller sizes and little-used species and in the great quantities of dead timber, as in the case of hardwoods in the eastern part of our district, there exists an immediate possibility for expanded industrial utilization.



Industrial developments in this direction are clearly in evidence. A number of new sawmills introduced in the past few years are operating in areas previously untouched. These particularly interesting trends in the wood products industries will be the subject of an article to appear shortly in our *Monthly Review*.



Problem: using wood waste

One final challenge to be mentioned here is the use of wood materials now wasted. About one-fourth of the sound timber cut in the U. S. is never used—half of this falls by the wayside in logging, the other half is sawmill waste. There are good opportunities for increased industrial output from these sources in Montana. Among highlights of the past year has been the announcement of the beginning of an industry new to Montana in the form of pulp and paper operations. Announcements were made in 1956 of plans for construction of two pulp-making operations: one at Missoula by Waldorf Paper Products Company and the other at Libby by the St.

HARDWOOD FOREST, ST. CROIX VALLEY, MINNESOTA-WISCONSIN

Regis Paper Company. An interesting feature these two operations share is that each will utilize sawmill wastes from nearby sawmills almost exclusively, thus leaving the significant possibilities for pulpwood production directly from forest stands still untouched.

It's well documented, therefore, that Montana's forest lands have considerable unexploited potential for industrial production. Furthermore, the yield from existing forest lands of the types of products used today can be greatly increased by improved management and protection of Montana's forests. From a practical standpoint, perhaps an increase of 50 to 60 percent in the volume of timber output can be accomplished with better balance of stands on forest lands in the western part of our district. The timber-based industries, already of great local importance, could contribute even more to the economy of this western region.

SUMMARY AND CONCLUSIONS

Forests, covering about one-fifth of the land area of the district, are clearly an important resource. A variety of industries is supported by them, such as lumber, millwork, pulp and paper and many wood specialties.

The district is divided into two broad forest areas which have very sharp contrasts—in the west the activity is focused on the production of sawtimber, in the east on pulpwood. The industries thus supported are significant ones, accounting for anywhere from one-third to three-fourths of total manufacturing employment in the strictly forest area communities.

Far from a has-been resource, the potential of our forests is most promising. We can point to plant expansions announced during 1956 as evidence of its vitality. Our forests can sustain an important segment of employment in contrast to many of our depletable resources which must eventually play out.

The forest potential is both immediate and long run.

(1) There is immediate potential to expand industry in both forest regions of our district—in the east through expanded use of hardwoods and in the west through the use of smaller size stock, little used species, great amounts of dead timber, and sawmill wastes.

(2) There is long-run potential for greatly increased productivity whereby we can as much as double the output of some key wood materials. This is a problem of forest management that will call for programs by the many owners of forest lands in the district working toward the same general goal—managing the forest resources to sponsor a sustained yield of timber. Specific measures include such things as improvement thinnings, planting, road building, protection and increased cuttings in surplus areas—of which the district has a surprising number. And as we have pointed out, one of the keys to solving this problem lies in the hands of farmers and other small private holders of forest land.

Forest authorities assure us that such an achievement is within our grasp. To return to the theme of our introduction, it would mean both a greater principal invested in the timber bank and a greater rate of return. The result would be better earnings than ever from our 50 million acres of forest land—if we treat them wisely. END

ACKNOWLEDGMENTS

Most of the basic statistics used were drawn from the Timber Sources Review *of the U. S. Forest Service. Additional information and comments were received from the Forest Service's Northern and North Central regions and from the Division of Forestry, State of Minnesota.*

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The district economy, 1956

In many respects, district economic developments resembled those of the nation in 1956. Thus, such wage rates as are periodically reported to government registered a new high both in the district and for the nation. Employment, perhaps the most important single economic statistic, was also at a high in the district and nationally. And in 1956, prices for the district's most important product, food, turned up. Previously, food prices had been falling while the cost of things we 'import' from the rest of the country edged up.

AGRICULTURE

District farmers enjoyed a slightly higher total of cash receipts in 1956 than was true in 1955. Preliminary income estimates indicate that cash receipts from marketing farm products may be up 3-4 percent in Minnesota and North Dakota. The same estimates show a slight drop in Montana receipts and a more substantial decline from a year ago in South Dakota, perhaps 10 percent.

Both good and bad crop conditions were experienced in the district during 1956—with weather and moisture accounting for most of the differences. Such differences took on a distinctly regional pattern for the most part. Across the western Dakotas and eastern Montana, drouth and the threat of drouth was a major concern during the spring and the summer months. A siege of hot, searing winds about mid-June caught early seeded small grains, particularly oats, at a tender stage and cut yields over a wide area, including parts of southern Minnesota.

The 1956 season was unusual in that late-seeded small grains on spring plowing seemed to suffer considerably less damage than early seedings on fall plowing—contrary to the usual experience. Early-season dryness cut hay yields sharply in many western areas of the district, with the result that winter feed supplies were reduced from normal.

Even where early heat and dryness hurt hay and small grains, however, many of these same areas got enough moisture at just the right time to produce one of the best corn corps in several years. Further east, Minnesota produced a record corn crop, even with some 14 percent fewer acres planted to corn than in 1955 and despite some conversion of land to the Soil Bank. In fact, most of the eastern district, including much of North Dakota and some areas of

eastern South Dakota, enjoyed excellent crops, while western areas of the district were reduced to well below normal.

Despite area extremes, however, crop production for the district as a whole was relatively large, about 6 percent below 1955 output. Most of the reduction was in wheat, down 12 percent from 1955. Production of durum wheat was the exception. Good crop yields throughout much of North Dakota, helped by newly-developed rust resistant varieties (along with weather conditions favorable to rust free development) produced a durum crop of 39 million bushels, the largest in recent years.

Although some cattle liquidation occurred in severely dry areas, cattle production continued large for the district as a whole. Numbers on feed were down about 9 percent from a year ago on October 1, but by the end of the year had increased more than seasonally to 5 percent more cattle on feed than a year ago.

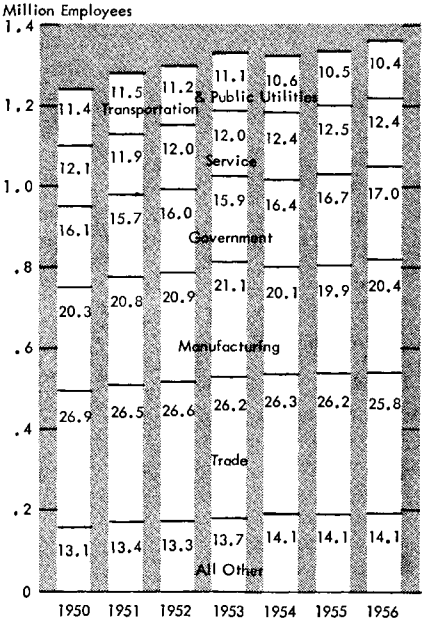
Hog production, on the other hand, was cut back even further in district states than the estimated national cutback of 8 percent. Reductions in 1956 spring pig farrowings in district states ranged from 17 to 26 percent, and farrowings for the year were down 16 to 23 percent. With reduced marketings, however, hogs enjoyed significant price improvement during the latter half of 1956. In fact, it can probably be said that the turning point in farm prices generally was reached about mid-1956.

NONFARM ECONOMY

A good measure of nonagricultural business in the district is the level of nonfarm employment. During 1956, employment rose in all district states; in the greater part of the district a new postwar record was established. In Upper Michigan and

CHART 1—DISTRICT EMPLOYMENT COMPOSITION BY INDUSTRY

Numbers in bars indicate percent of total



northwestern Wisconsin nonfarm employment rose from the relatively low level of 1955 but it did not equal the level which prevailed from the years 1950 to 1955.

The volume of nonresidential construction, which proved to be a main prop to the nation's economy in 1956, set another record during the year.

The expansion in this type of construction more than offset the contraction in home building. The amount of contracts awarded for all types of nonresidential construction — industrial, commercial, educational, public and heavy engineering —aggregated $542 million in this district, *an increase of $92 million from the 1955 figure.*

The district boom in nonresidential construction was less marked than the national expansion. Industrial plant expansion, in particular, was not as strong here in 1956 as in the more industrialized areas. The smaller bulge in construction activity is reflected in the relatively moderate employment rise in this field — 1956 employment being 3 percent above the average in 1955 for both residential and nonresidential projects.

A strong district rise in manufacturing employment compensated for the moderate rise in construction. In this field the hiring of additional labor exceeded the national rate. The increase in the average monthly total in 1956 was 4 percent; in the whole nation it was only 2 percent. Most of the additional district workers were engaged in the manufacture of durable goods.

In Minnesota, where nearly 90 percent of the total district workers in the manufacture of durable goods are employed, the large increase in employment in 1956 was concentrated in the manufacture of electrical and nonelectrical machinery, excluding agricultural machinery. (In the latter industry, the average monthly employment in 1956 was down almost 10 percent from 1955.) Smaller increases in employment occurred in lumber and wood products, fabricated metal products, stone, clay and glass, and in primary metals.

In the field of government service, which ranks third among the employment categories in the Ninth district, the 1956 increase averaged 3 percent, due largely to the hiring of additional teachers in schools and colleges, one result of the steadily growing school population. In the other enterprises—mining, transportation and utilities, trade, finance, insurance and service—the increases in employment ranged from a fraction of 1 percent to a maximum of 2 percent.

Not all industries enjoyed prosperity. One industry to face a declining market was residential building. The number of new housekeeping units authorized by permits in Ninth district cities was down 19 percent from the number authorized in 1955. During the autumn builders in the larger cities cut back sharply on their building and laid off some of their workers.

The mining of iron ore was interrupted by labor disputes in the steel industry and, later, in the Pittsburgh Steamship division of the United States Steel Corporation. These disputes drastically reduced shipments of ore to lower lake ports in July and August. Shipments in these two months totaled 10.7 million gross tons as compared with over 12.5 million gross tons each in

May and June. During this period employees lost substantial amounts of income so that it became necessary for many firms to adjust repayments on charge accounts and instalment loans. Before the end of the shipping season part of the lost income was recovered through overtime pay. In the 1956 season 77.6 million gross tons were shipped compared with 87.5 million in '55 and 60.8 million in '54.

Slow farm-implement sales caused layoffs by manufacturers. Because of the strong demand for workers in industrial centers, some of these workers secured either temporary or permanent employment with other firms. This shortened the period of idleness and, thereby, reduced the loss of income for many laid-off workers and their families. The mild upturn in cash farm income has created some confidence that the sales prospects for farm implements will be brighter this spring.

The slump in automobile sales did not affect the economy of this district as much as it did other regions of the nation. Only one assembly plant and a small number of parts manufacturers are located here. Obviously, however, automobile dealers and salesmen were affected by the drop in sales. In the four district states the decrease in sales, according to registrations, ranged from 9 percent in Minnesota to 19 percent in South Dakota. Even the latter percentage is small compared with a 34 percent decrease in the state of Michigan. Nationally, passenger car sales dropped from 7.2 million in 1955 to an estimated 6.0 million in 1956, a decrease of 16 percent.

Ninth district member banks

Their annual financial statements disclose that our member banks enjoyed a prosperous 1956. Deposits, net current earnings and loans registered new all-time highs. Interest rates, of course, were also rising. Bank expense rose too. Salaries and interest on time deposits were responsible for almost 70 percent of the $10 million addition to Ninth district member bank operating expense in 1956.

Bank income accounts last year primarily reflected a substantial demand for loans of all types. Thus $14 million of the $18 million additional revenue at district member banks in 1956 represented increased revenue from loans.

Loans increased at member banks in every district state or part state. Gains ranged from 2.4 percent at member banks in South Dakota to 13.5 percent at our member banks in Michigan. During the year 1956 loans and investments *averaged*

$1,823 million and $1,692 million respectively at all district member banks. In the previous year loans and investments averaged $1,621 million and $1,856 million respectively.

Thus, in 1956, for the first time in many years, the value of loans exceeded the value of investment securities at our member banks. This notable occasion is marked on chart 2 by the intersection of the lines representing loans and investments.

In every year for the past decade loans at our member banks have grown. Every major category of bank loans has shared the growth. Loans secured by real estate scored the largest gain in the postwar decade—up $436 million. Business-type loans, officially labeled 'commercial and industrial,' rose $362 million in the same period. Consumer loans and production-type loans to farmers were up by $336 million and $113 million respectively in the 10-year period.

The impressive expansion of real estate credit was, of course, fostered by government insurance and guarantees of home mortgages. At the end of 1956 over half the real estate loans on the books of district member banks were insured or guaranteed. Loans with this feature are not strictly comparable to other types of bank loans owing to the reduced risk entailed. The lower risk factor in turn has induced banks to acquire government-underwritten mortgage loans in spite of the fact that they yield less than most other kinds of bank loans.

Chart 3 indicates that loans secured by real estate rose less rapidly in 1956 than they did in previous years. This reduction of the growth rate reflected the fact that yields on other loans and investments were

CHART 2—DEPOSITS, LOANS AND INVESTMENTS OF DISTRICT MEMBER BANKS

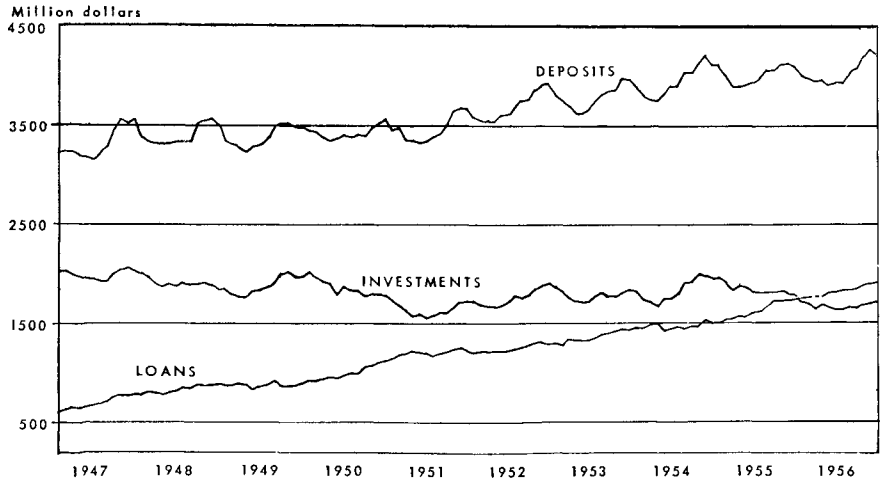
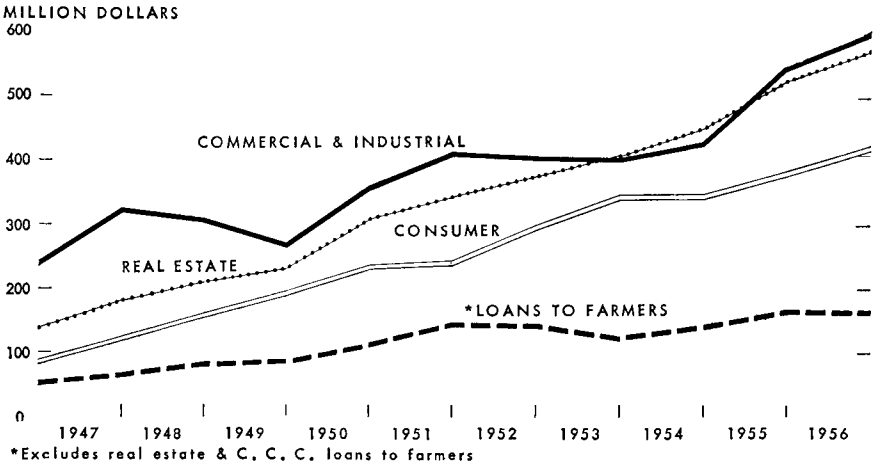


CHART 3—TYPES OF LOANS AT DISTRICT MEMBER BANKS



rising while yields on insured and guaranteed mortgages remained unchanged at the fixed legal maximum. Hence, lenders found such mortgages becoming less attractive relative to other uses for funds.

While the increase in all kinds of mortgages held was $74 million in 1955 it was down to $46 million in 1956. Furthermore, while $41 million of insured or guaranteed mortgages were added in 1955, only $11 million of such mortgages were added in 1956. These figures indicate that mortgage loans without a fixed yield were added *more* rapidly in 1956 than in 1955 while loans of fixed yield were added less rapidly.

The rate of increase in commercial and industrial loans was also reduced in 1956. These loans rose $116 million in 1955 and $55 million in 1956. Since the proceeds of commercial and industrial loans are often used to finance the purchase of inventories, it may be that the loan figures reflected a lowered rate of inventory accumulation in 1956, particularly since other data also suggest a lowered rate of inventory accumulation in 1956.

Production loans to farmers, which increased $23 million in 1955, were unchanged in 1956. Loans secured by farm real estate are included in the real estate loan total mentioned previously. Farm real estate loans went up $2 million in 1955 and $1.5 million in 1956. Loans to farmers guaranteed by the Commodity Credit Corporation are not included in either the farm real estate or farm production loans mentioned above. These loans fell $32 million in 1955 and $15 million in 1956.

The only major category of loans

which registered a larger gain in 1956 than in 1955 was the consumer type. Although the auto component of consumer loans displayed a lesser growth rate in 1956 the increase of other retail instalment paper was greater in 1956 than in 1955.

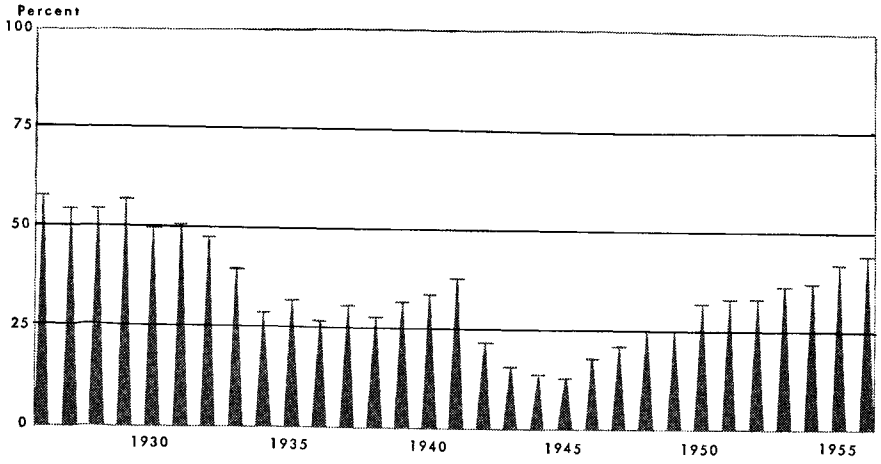
The postwar loan expansion at district banks (and at banks in the rest of the country) has been financed in large part by the liquidation of securities, particularly Treasury obligations. The removal of government securities from bank portfolios has narrowed the range of alternatives available to banks in need of cash. Thus, the importance of borrowing by banks has been growing. In none of the years since the early 1930's have borrowings of member banks from this bank, for example, been as large as in 1955 or 1956.

Not since 1932 have loans represented such a large proportion of district member bank deposits as at the end of 1956. The ratio of loans to deposits is one popular indicator of bank liquidity. This ratio has risen in every one of the postwar years as shown by chart 4.

Principally in response to the substitution of loans for investment securities, the gross receipts of our member banks have climbed in every one of the postwar years. The average yield on loans held by the member banks is well over twice the yield earned on investments.

Another factor operating to lift gross receipts has been a rising level of interest rates in general. Reflecting this is the fact that receipts from loans were up 17 percent last year while average loans held were up only 12.5 percent. And income from securities was up slightly—despite a reduction from the previous year in the average amount held.

CHART 4—RATIO OF LOANS TO DEPOSITS, NINTH DISTRICT MEMBER BANKS



EARNINGS & DIVIDENDS OF DISTRICT MEMBER BANKS

(millions of dollars)

	1955	1956	Change
Loan income	$ 83.8	$ 97.8	$+14.0
Investment income	39.6	40.7	+ 1.1
Other income	24.9	27.5	+ 2.6
TOTAL Current Earnings	**148.3**	**166.0**	**+17.7**
Salaries	44.9	48.9	+ 4.0
Interest on time deposits	15.1	17.8	+ 2.7
Other current expense	33.0	36.9	+ 3.9
TOTAL Current Expense	**93.0**	**103.6**	**+10.6**
Net current earnings	55.3	62.4	+ 7.1
Deduct net of other charges and credits	7.3	18.2	+10.9
Net profits before income tax	48.0	44.2	— 3.8
Income tax	20.0	18.0	— 2.0
Profits after taxes	**28.0**	**26.2**	**— 1.8**

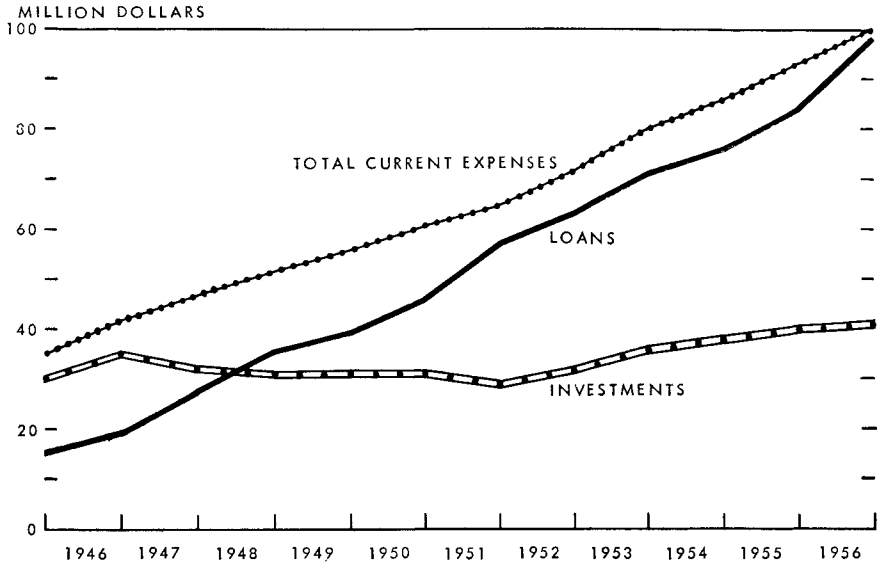
The table shows that while income from loans, securities, and other sources rose in 1956, the principal components of expense also rose. Thus, for example, salaries were up $4 million and interest on time deposits was up $2.7 million in 1956. But total current expense increased by $7.1 million less than did total current earnings with the result that *net* current earnings rose by this amount.

However, in financing the loan expansion which produced most of the addition to loan revenues, the banks liquidated securities, sometimes at a loss. Such losses jumped from $5.4 million in 1955 to $12.1 million in 1956. Owing to deductions from net current earnings for these and other charges, the net profits of district member banks fell by $3.8 million in 1956; but income taxes fell by $2 million with the result that profits after taxes declined but $1.8 million.

It is perhaps worthy of note that the higher level of interest rates generally in 1956 was associated with a depressed bond market which in turn gave rise to losses by banks on the sale of securities; also, expenses of the member banks were enlarged by reason of an increase in the average rate of interest paid on time deposits. In other words, rising interest rates have added to expense as well as to revenue at the banks.

The behavior of member bank deposits serves to confirm the other evidence of favorable economic conditions in the district during 1956. In 1955, while deposits at member banks in the rest of the nation rose somewhat, district banks reported a slight loss of deposits. But in 1956, preliminary figures disclose that district member banks enjoyed a somewhat larger percentage deposit growth than member banks in the rest of the nation. The respective figures were +2.9 percent and +1.8 percent (preliminary estimates).

CHART 5—REVENUE FROM LOANS AND INVESTMENTS AND TOTAL CURRENT EXPENSE



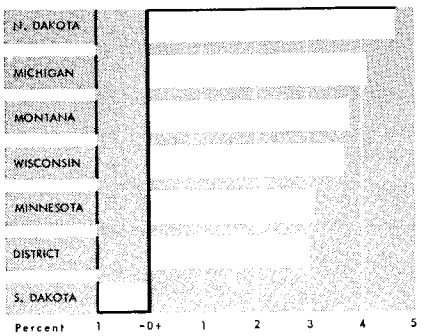
Demand deposits and time deposits accounted for $76 million and $45 million respectively of the $121 million total district increase. The time deposit gain of $45 million compares with an increase of only $32 million in 1955.

Doubtless the improvement of prices for commodities produced on district farms aided deposits at country banks in the district. These banks enjoyed a 3.5 percent deposit increase during 1956 while city member banks in the Ninth district reported a 2.3 percent gain.

Only at member banks in South Dakota did deposits fail to register an increase for the year. Farm incomewise, that state fared least well of any in the district last year largely because of drouth conditions. At member banks in other district states, 1956 deposit growth ranged from a little more than 3 percent in Minnesota to more than 4.5 percent in North Dakota.

CHART 6—MEMBER BANK DEPOSITS 1956

Percentage change



Federal Reserve Bank of Minneapolis

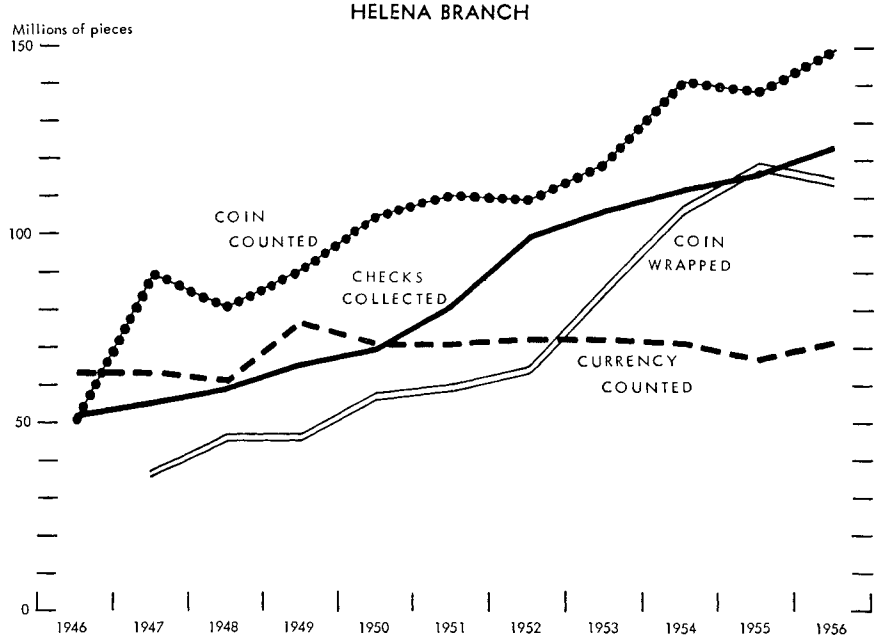
During 1956, as the building program neared completion, additional space became available for use by departments previously lodged in other buildings. By the end of the year, for the first time since 1950, all the bank's operations were conducted under one roof. The roof, incidentally, had risen eight stories since the construction program began in 1955.

OPERATIONS

In spite of the many inconveniences which resulted from the building program, service to the member banks, the government and the public was undiminished in quality or quantity. Some departments of the bank accomplished a larger volume of work than ever before.

For example, the *Check Collection* department of the head office and the Helena branch functioned 6.5 percent more items in 1956 than in 1955. This department, which employes more workers than any other, handles postal money orders and savings stamp albums as well as government and other checks. The number of items handled has increased in each of the postwar years and in 1956, at 123,580 million, was more

CHART 7—VOLUME OF OPERATIONS, MINNEAPOLIS FEDERAL RESERVE BANK AND HELENA BRANCH



than double what it had been as recently as 1948.

Another department which experienced larger volume in 1956 than in 1955 was *Currency and Coin*. More than 70 million pieces of currency and more than 148 million coins were counted by the department in 1956, up 5 percent and 8 percent respectively from the year before. The dollar value of currency shipments to and from member banks was up 10 percent and 15 percent respectively.

The bank's *Fiscal Agency* department is principally concerned with the issue, redemption and exchange of U. S. Treasury securities. In 1956 the department accomplished 4,469 thousand such transactions, up 3 percent from 1955.

Other tasks performed by 'Fiscal' for the government included the payment of coupons detached from Treasury securities, the bookkeeping in connection with Treasury deposits at the commercial banks, and the destruction of Treasury currency when it became unfit for use.

As a special service, Fiscal Agency buys and sells government securities on the open market for the account of banks in the district. Such transactions numbered 2,145 in 1956.

One of the few departments of the bank to experience a slackened pace in 1956 was the *Non Cash Collections* department. A decline of almost 16 percent was recorded in the number of items handled. This resulted from the adoption of new arrangements for processing certain grain drafts.

The bank's *Safekeeping* department had custody of securities worth $1.477 billion at the end of 1956. This amount has been falling in response to the liquidation of securities by district banks to finance loan expansion. Despite the reduction in the dollar value of securities held, the *number* of securities held and the *number* of coupons clipped have increased. The 357,000 coupons clipped in 1956 represented an increase of 9 percent over 1955.

A tremendous volume of funds is shifted from one part of the nation to another every day by means of the Federal Reserve Wire Transfer System. Transactions in the market for 'federal funds'—where one commercial bank borrows from another—are ordinarily effected by wire transfers. At almost 66 thousand, the number of wire transfers handled by the bank in 1956 was up 6.5 percent from the year before.

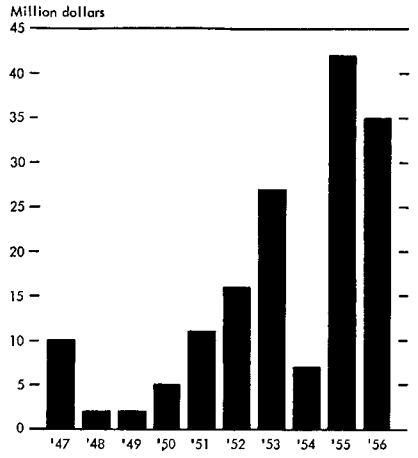
FINANCIAL STATEMENTS

The number of loans made by this bank reached a postwar high in 1956, up 11 percent from 1955. Despite this, the average daily *amount* of loans at the Federal Reserve Bank of Minneapolis in 1956 was lower by 17 percent than in 1955. In the first half of 1956 Federal Reserve loans averaged substantially more than a year earlier while in the last half loans averaged substantially less than a year earlier.

The reduction in the average daily volume of loans in 1956 was not reflected by a reduction in the bank's

CHART 8—MEMBER BANK BORROWING

Average daily volume



earnings on loans. Such earnings (see Statement of Earnings and Expense) rose by 20 percent. This was produced by an increase in the discount rate from 2½ percent to 3 percent on April 13.

Earnings on securities held for the bank (in the Federal Open Market portfolio) also increased in 1956 despite a reduction in the daily average amount held. The 35 percent addition to revenue from securities held entirely reflected increased yields on securities acquired to replace those sold or matured. Since mid-1954, yields on government securities have been in an upward trend.

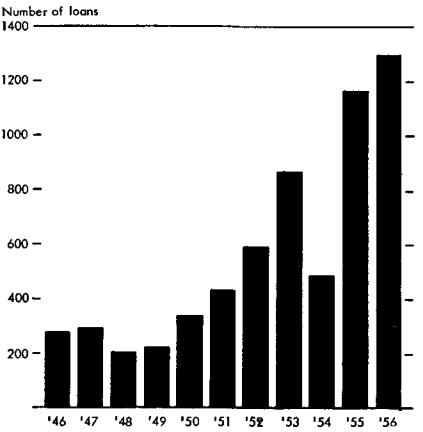
Expenses of the bank rose $838 thousand in 1956. With revenues higher by $3,587 thousand, *net* current earnings were up by $2,759 thousand. After allowance for certain other charges and credits, net earnings available for payment to the Treasury and stockholders and for transfer to surplus were up $2,682 thousand from 1955.

Since the dividend rate on Federal Reserve stock is fixed by law at 6 percent, the 5.7 percent increase in dividends paid during 1956 resulted entirely from the issue of additional shares. As member banks enlarge their capital and surplus they are required to enlarge their holdings of Reserve bank stock in the same proportion.

Earnings after the payment of dividends in 1956 amounted to $9,340,498. Of this amount, 90 percent was paid to the U. S. Treasury as interest on Federal Reserve Notes and 10 percent was added to the surplus of the bank.

CHART 9—LOANS GRANTED TO MEMBER BANKS

By the Minneapolis Federal Reserve Bank



EARNINGS AND EXPENSES

	1956	1955
Earnings from:		
Discounted Bills	$ 1,010,077	$ 840,861
United States Government Securities	13,086,844	9,669,412
Industrial Advances	2,591	3,997
All Other	13,764	12,007
Total Current Earnings	$14,113,276	$10,526,277
Expenses:		
Operating Expenses	$ 4,174,681	$ 3,337,558
Assessment for Expenses of Board of Governors	132,600	105,000
Federal Reserve Currency:		
Original Cost	29,371	65,895
Cost of Redemption	9,933	10,309
Net Expenses	$ 4,346,585	$ 3,518,762
Current Net Earnings	$ 9,766,691	$ 7,007,515
Additions to Current Net Earnings:		
Profit on Sales of U. S. Government Securities (net)	7,371	—38
All Other	377	86,520
Total Additions	$ 7,748	$ 86,482
Deductions from Current Net Earnings:		
Reserve for Contingencies	$ 11,458	$ 11,536
All Other	438	2,022
Total Deductions	$ 11,896	$ 13,558
Net Addition to Current Net Earnings	$ 4,148	$ 72,924
Net Earnings before payments to U. S. Treasury	$ 9,762,543	$ 7,080,439
Paid to U. S. Treasury (Interest on F. R. Notes)	8,406,449	6,013,073
Dividends Paid	422,045	399,257
Transferred to Surplus (Section 7)	934,049	668,109
Surplus Account (Section 7)		
Balance at Close of Previous Year	$17,586,155	$16,918,046
Transferred from Profits of Year	934,049	668,109
Balance at Close of Year	$18,520,204	$17,586,155

STATEMENT OF CONDITION

ASSETS	Dec. 31, 1956	Dec. 31, 1955
Gold Certificates	$ 351,392,666	$ 339,278,776
Redemption Fund for F. R. Notes	22,952,138	23,728,983
Total Gold Certificate Reserves	$ 374,344,804	$ 363,007,759
Other Cash	$ 9,319,030	$ 7,907,872
Bills Discounted	3,530,000	1,355,000
Foreign Loans on Gold	625,000	25,000
Industrial Advances	42,350	59,630
U. S. Government Securities:		
Bonds	63,283,000	67,895,000
Notes	206,759,000	343,283,000
Certificates of Indebtedness	246,937,000	143,476,000
Bills	38,879,000	36,414,000
Total U. S. Government Securities	$ 555,858,000	$ 591,068,000
Total Loans and Securities	$ 560,055,350	$ 592,507,630
Due from Foreign Banks	556	557
F. R. Notes of Other F. R. Banks	14,376,750	9,587,500
Other Assets	146,350,942	143,662,711
Total Assets	$1,104,447,432	$1,116,674,029
LIABILITIES		
Federal Reserve Notes in Actual Circulation	$ 498,235,535	$ 531,709,075
Deposits:		
Member Bank—Reserve Accounts	$ 398,117,190	$ 405,586,297
U. S. Treasurer—General Account	22,651,606	25,107,737
Foreign	7,400,000	9,650,000
Other Deposits	3,835,681	5,693,589
Total Deposits	$ 432,004,477	$ 446,037,623
Deferred Availability Items	$ 142,597,491	$ 108,767,705
Other Liabilities	594,681	411,340
Total Liabilities	$1,073,432,184	$1,086,925,743
CAPITAL ACCOUNTS		
Capital Paid In	$ 7,182,100	$ 6,860,650
Other Capital Accounts	23,833,148	22,887,636
Total Liabilities, Capital Accounts	$1,104,447,432	$1,116,674,029

One weakness of balance sheets is that they are dated, and thus, if some of the balances fluctuate widely from day to day, a particular balance sheet may not accurately represent the normal condition of a business. And so it is with the year-end statement of this Federal Reserve Bank.

Member bank borrowings, for example, averaged $35.4 million in 1956—down 17 percent from the 1955 average; yet, the year-end statement shows member bank borrowings of $3.5 million, up from the $1.4 million figure shown at the end of 1955.

At the end of 1956, district member bank reserve balances were down more than $7 million from the end of 1955; yet, during the whole month of December 1956, district member bank reserve balances averaged more than $8.5 million higher than the average a year earlier. Furthermore, average reserves *minus* average borrowings were $434 million in December 1956, up $25 million from the year-earlier period.

The bank's gold certificate reserves were aided in 1956 by the inflow of deposits to the Ninth district. This is because when a check drawn on a member bank outside the district is deposited with us, gold certificates are transferred from the Federal Reserve bank serving the drawee bank to this Federal Reserve bank.

Our note circulation declined again in 1956. The currency needs of this district are now satisfied in part with notes issued by other Reserve banks; hence, the amount of our notes outstanding does not reflect the currency circulation in the district.

The bank's capital funds were augmented, as noted previously, by the sale of new stock and by the transfer to surplus of earnings which remained after the payment of dividends and of interest on Federal Reserve notes to the Treasury.

MANAGEMENT

In 1956 for the first time in many years there were no changes in the personnel of the Boards of Directors of either the Federal Reserve Bank of Minneapolis or its Helena Branch.

At the head office Mr. Leslie N. Perrin, member of the Board of Directors and former President of General Mills, Incorporated, was reappointed Class C director by the Board of Governors of the Federal Reserve System for a three-year term beginning January 1, 1957. He was also redesignated Chairman of the Board and Federal Reserve Agent for 1957. Dr. Oscar B. Jesness, Head of the Department of Agricultural Economics at the University of Minnesota, was redesignated Deputy Chairman for the coming year.

Mr. Harold N. Thomson, Class A director, and Mr. J. E. Corette, Class B director, were both re-elected by the member banks of the district for additional three-year terms beginning January 1, 1957.

At the Helena Branch, Dr. Carl McFarland, President of the Montana State University at Missoula, Montana, Mr. George N. Lund, Chairman

of the Board and President of the First National Bank of Reserve, Montana, and Mr. J. Willard Johnson, Financial Vice President and Treasurer of the Western Life Insurance Company of Helena, Montana, were all reappointed to two-year terms on the Branch Board, beginning January 1, 1957. Dr. McFarland's appointment was made by the Board of Governors while Mr. Lund and Mr. Johnson were reappointed by the bank's directors.

Mr. Julian B. Baird, Chairman, First National Bank of St. Paul, was renamed by our Board to an additional one-year term as member of the Federal Advisory Council.

There were changes in the official staff of the bank. Retiring from the bank on April 1, 1956 was Mr. Otis R. Preston, Vice President in charge of the Public Services department, who had been on the bank's staff for nearly 36 years. Two other officers announced their retirement from active service to become effective February 1, 1957; these were Mr. Earl B. Larson, Vice President and Cashier, and Mr. George M. Rockwell, Assistant Cashier. Mr. Larson had been the officer in charge of the Fiscal Agency department for many years and Mr. Rockwell had been associated with the bank discount and credit functions.

Advanced from Assistant Vice President to Vice President were Mr. Melvin B. Holmgren, officer in charge of the Fiscal Agency department, and Mr. Arthur W. Johnson, officer in charge of the Check Collections department. Mr. Clarence W. Groth, Vice President, was made Vice President and Cashier. These promotions were all effective January 1, 1957. On March 1, 1956 Mr. Oliver S. Powell and Mr. Albert W. Mills were reappointed to five-year terms as President and First Vice President of the bank respectively.

PUBLIC RELATIONS

The bank's programs of bank relations and public information and education were somewhat curtailed during the year because of our building expansion program. The annual series of Short Courses in Central Banking, which have been conducted each year since 1948, was temporarily discontinued and will not be resumed until early in 1958. Tours of the bank and special luncheons were also reduced in number because of the building program.

The remainder of our Public Services activities was continued in much the same form as in 1955. The annual Assembly program for member bank officers and directors was held in April and attended by 517 guests. The eighth annual Workshop meeting in May drew a record 122 college teachers of money and banking and economics, and November marked the 13th annual Examiners Conference for representatives of all federal and state supervisory agencies in the district.

Representatives from the bank and the Helena Branch called on each of the nearly 1,300 banks in the dis-

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DIRECTORS OF THE FEDERAL RESERVE BANK OF MINNEAPOLIS AND HELENA BRANCH

DIRECTORS

Class A

	Term Expires December 31
HAROLD C. REFLING, *Cashier,* First National Bank in Bottineau, Bottineau, North Dakota	1957
JOSEPH F. RINGLAND, *President,* Northwestern National Bank of Minneapolis, Minneapolis, Minnesota	1958
HAROLD N. THOMSON, *Vice-President,* Farmers & Merchants Bank, Presho, South Dakota	1959

Class B

RAY C. LANGE, *President,* Chippewa Canning Company, Inc. Chippewa Falls, Wisconsin	1957
T. G. HARRISON, *President,* Super Valu Stores, Inc. Hopkins, Minnesota	1958
J. E. CORETTE, *President and General Manager,* Montana Power Company, Butte, Montana	1959

Class C

O. B. JESNESS,[2] *Head,* Department of Agricultural Economics, University of Minnesota Institute of Agriculture, St. Paul, Minnesota	1957
F. ALBEE FLODIN, *President and General Manager,* Lake Shore, Inc., Iron Mountain, Michigan	1958
LESLIE N. PERRIN,[1] *Director,* General Mills, Inc., Minneapolis, Minnesota	1959

HELENA BRANCH

Appointed by Federal Reserve Bank

A. W. HEIDEL, *President,* Powder River County Bank, Broadus, Montana	1957
J. WILLARD JOHNSON, *Financial Vice-President and Treasurer,* Western Life Insurance Company, Helena, Montana	1958
GEO. N. LUND, *Chairman of the Board and President,* The First National Bank of Reserve, Reserve, Montana	1958

Appointed by Board of Governors

GEORGE R. MILBURN,[3] *Manager,* N Bar Ranch, Grass Range, Montana	1957
CARL MCFARLAND,[1] *President,* Montana State University, Missoula, Montana	1958

[1] Chairman
[2] Deputy Chairman
[3] Vice-Chairman

OFFICERS OF THE FEDERAL RESERVE BANK OF MINNEAPOLIS AND HELENA BRANCH

OFFICERS

OLIVER S. POWELL, *President*

ALBERT W. MILLS, *First Vice-President*

Banking Department

CARL E. BERGQUIST, *Assistant Cashier*

FREDERICK J. CRAMER, *Personnel Officer*

JOHN J. GILLETTE, *Assistant Cashier*

CLARENCE W. GROTH, *Vice-President & Cashier*

ARTHUR W. JOHNSON, *Vice-President*

EARL B. LARSON, *Vice-President*

MILFORD E. LYSEN, *Operating Research Officer*

ORTHEN W. OHNSTAD, *Assistant Vice-President*

CHRISTIAN RIES, *Assistant Vice-President*

GEORGE M. ROCKWELL, *Assistant Cashier*

MARCUS O. SATHER, *Assistant Cashier*

MAURICE H. STROTHMAN, JR., *Vice-President*

CLEMENT VAN NICE, *Assistant Vice-President*

Audit Department

ARTHUR J. MCNULTY, *General Auditor*

Bank Examination Department

HAROLD G. MCCONNELL, *Vice-President*

ROGER K. GROBEL, *Chief Examiner*

Fiscal Agency—Government Securities

MELVIN B. HOLMGREN, *Vice-President*

WILLIAM C. BRONNER, *Assistant Cashier*

Legal Department

SIGURD UELAND, *Vice-President, Counsel and Secretary*

Research Department

FRANKLIN L. PARSONS, *Director of Research*

OSCAR F. LITTERER, *Business Economist*

Helena Branch

KYLE K. FOSSUM, *Vice-President assigned to Helena Branch*

HAROLD A. BERGLUND, *Assistant Vice-President assigned to Helena Branch*

JOHN L. HEATH, *Assistant Cashier assigned to Helena Branch*

MEMBER OF FEDERAL ADVISORY COUNCIL

JULIAN B. BAIRD, *Chairman*, The First National Bank of Saint Paul, St. Paul, Minnesota

INDUSTRIAL ADVISORY COMMITTEE

SHELDON V. WOOD, Minneapolis, Minnesota, *Chairman*

JOHN M. BUSH, Ishpeming, Michigan

A. H. DAGGETT, St. Paul, Minnesota

A. B. HEIAN, Chippewa Falls, Wisconsin

WALTER M. RINGER, SR., Minneapolis, Minnesota

trict at least once during the year. Some of the larger banks received more than one call. We also continued our program of sending men from our staff to member banks for commercial bank training during the year. Federal Reserve Bank speakers appeared before approximately 13,400 persons during the year; our movie was shown to a reported 20,300 additional persons; and 15,300 additional copies of our picture book were distributed. Other movies and publications were also in good demand and our two currency displays were in frequent use at bank open houses and anniversary celebrations throughout the district.

Two new national banks opened in the district during 1956 and two existing national banks closed. One state bank became a Federal Reserve member during the year and one state bank withdrew from membership. One state member bank converted to a national bank. The net result for the year was that the total number of member banks in the district remained unchanged at 473. The total number of banks in the district also remained unchanged at 1,296.

END