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CONTENTS

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FOURTH FEDERAL RESERVE DISTRICT

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1953 Banking Review

THE first half of 1953 was characterized by a heavy demand for credit relative to the supply. Yields on Treasury securities rose to the highest levels since the mid-'Thirties. Up to June, the money market was increasingly tight. But the second half of the year saw a reversal of trend. Demand for credit at banks, especially short-term business loans, failed to show the usual seasonal increase. The reserve position of banks was also somewhat easier than during the first half of the year. Prices on Treasury securities rose to points where yields were comparable with those prevailing at the start of the year. Treasury bill yield, in fact, fell to levels equaling those of early 1951.

Loans to Business Loans to business made by banks in the Fourth District reached a peak for the year in May, and subsequently showed a steady decline. This was in contrast to the usual expectation that business borrowing will increase during the latter half of the year. As the accompanying chart shows, 1949 had been the last previous year in which a decline in outstanding business loans occurred during the second half of the year.

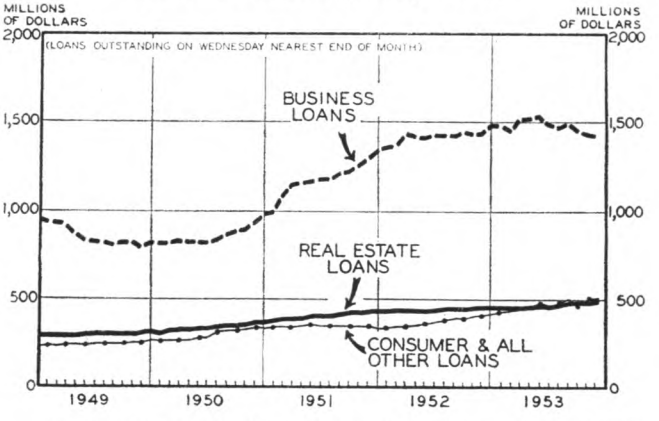
While loans in this District were showing a net decline, totals for the United States as a whole registered a less-than-seasonal increase during the second half.

The bar chart shows changes in business loans outstanding to major commercial and industrial groups of the Fourth District during 1952 and 1953. The year 1953 indicates either declines in loans, or gains below the 1952 level. Metals and metal products manufacturers recorded the largest decline, with outstandings at year's end amounting to some $50 million below the level at the beginning of the year. Most of the decline was recorded in the period since June.

The magnitude of the increase in business loans in this District in 1952, and the decline in 1953, is closely tied to the performance of the important metals group. Borrowing, or failure to borrow, by this group has a strong effect on the showing of business loans made by the larger District banks.

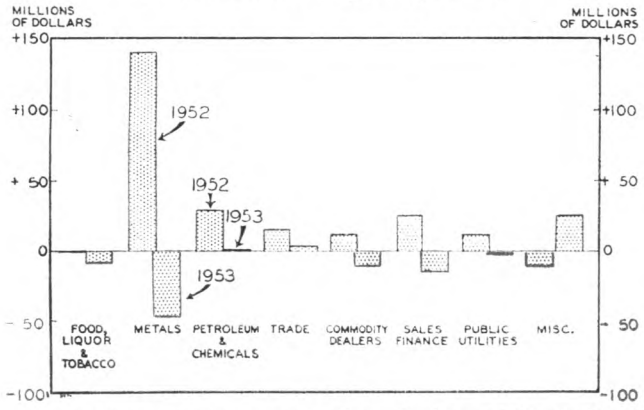
The metals group has been paying off debt which was incurred in the early days of the post-Korean defense boom. Much of the need for working capital has been met from funds supplied internally from

BUSINESS, REAL ESTATE, AND CONSUMER LOANS
(Fourth District reporting banks)



. . . business loans declined slowly but almost continuously after May. In contrast, real estate loans and consumer loans posted gains to new record levels.

NET CHANGE IN BUSINESS LOANS BY BUSINESS OF BORROWER
(Fourth District reporting banks)



. . . business loans outstanding during 1953 declined, especially in the metals manufacturing and sales finance groups of borrower.

accelerated depreciation allowances, and from earnings retained from a high level of profits. A recent slackening in the volume of orders, plus large inventories, may also help to explain the decline in the needs of the metals-industry group for short-term funds from banks.

Other groups have also reported either a less-than-seasonal expansion or a contraseasonal decline in outstandings. During the latter part of the year, expected seasonal increases in borrowing for working capital and inventory purposes failed to take place among such groups as food, liquor and tobacco manufacturers, commodity dealers, and retail and wholesale trade. Explanation for a part of this development may be found in lower farm prices, making possible a given physical volume of inventory with a lower working capital. Declining sales and prices probably influenced the reticence to incur new debt on the part of some, but not all, elements within the trade groups.

While total business loans at leading banks declined, loans at banks in the smaller cities registered an increase. The pace, however, was slightly below that of a year ago. Changes in lending activity at the "country" banks do not usually show the volatile swings shown at the larger city banks. The continued volume of loans at the smaller banks would seem to indicate that among the farmers and smaller businessmen, the usual need for funds is still present.

Real Estate Loans An accompanying chart, showing levels of business, real estate, and consumer loans, records the fact that while business loans declined during the second half of the year, real estate and consumer loans continued the upward postwar climb. Each of the latter types of loan continued to push to new all-time highs throughout 1953. Such a pattern appears to have been general for the whole country.

In the Fourth District, the level of outstanding real-estate loans rose by approximately 5 percent — a gain which was not quite so strong as that reported in 1952. As available credit became tighter in the early part of the year, it was harder for prospective borrowers to secure funds under the relatively low rates then required on F.H.A. and V.A.-guaranteed mortgages; at such rates the relatively illiquid mortgages were not sought by banks during early 1953. Subsequently, the Federal Housing Administration and the Veterans Administration raised the rates permissible on guaranteed mortgages by one-half of one percent. Despite the fact that the financing cost of new homes was greater this year, housing starts continued at high levels, thus promoting the growth of real-estate loans.

Consumer Credit Near-record production and sales of automobiles during the year contributed to a further expansion in the volume of outstanding consumer credit. Outstanding consumer credit in the United States held by commercial banks topped $9 billion during the year, a gain of approximately 24 percent over a year ago. In this District, outstanding consumer credit held by banks exceeded $600 million at year end, which was a gain of about 30 percent over the year-ago level. The total volume of outstanding loans has reached all-time highs, month by month for over a year and a half. During the final quarter of the year, however, the pace of expansion, as shown by the volume of new loans granted each month, has been slackening.

Outstanding loans for repair and modernization, automobiles, and consumer-durable items, formed the bulk of consumer borrowing. The yearly gain for automobiles, and to a lesser extent consumer-durables, can be partially discounted as a result of the 1952 steel strike. The return of competitive selling for automobile and appliance dealers brought with it some easing of terms on consumer credit, along with additional sales effort in the form of generous trade-in allowances. Toward the end of the year, outstanding consumer loans made directly by banks to individuals for automobiles and durable goods declined slightly. Purchases of instalment paper from dealers, however, continued at relatively high levels.

Investments Total investments of leading banks in the United States finished the year at levels slightly above those prevailing at the beginning of the year. In this District, the year's experience closely paralleled that for all the United States. As the accompanying chart shows, total investments declined during the first half of the year, as banks sought to maintain their reserve positions while the relative supply of credit was tightening.

In the period from the beginning of January through the second week in May, holdings of Treas-

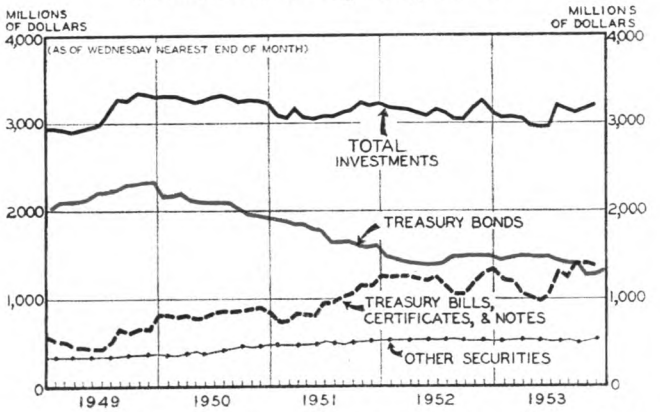
ury short-term securities declined $321 million at leading banks in this District. Such a drop accounted for most of the decline in total investments during the period. After June, bank portfolios of short-term Treasury securities expanded rapidly to the highest levels of the postwar period. The expansion in short-term securities at banks during the second half of any year reflects, in part, the inverse relationship between the pattern of Treasury tax receipts and its cash needs. The gradual move toward concentration of corporate tax payments in the first half of the year accentuates the Treasury's need to borrow during the second half.

Holdings of Treasury bonds declined throughout much of the year, with some recovery appearing in the latter months. The sharp decline during August, accompanied by an upturn in holdings of short-term securities, reflects the result of Treasury refunding operations. The fairly steady gains since September in holdings of Treasury bonds probably reflect the lack of loan demand by business. When the usual seasonal demands for loans were not realized in the District, banks characteristically used the funds to purchase Treasury securities in order to maintain earnings.

State and Municipal Securities Financing of public expenditures by state and local governments for purposes such as highways, as well as educational and recreational facilities, continued at high levels during 1953, with the volume of new borrowed capital exceeding 1952 levels. Bank participation in such financing was again substantial, and in the early part of the year it was shared by all categories of banks.

During the second half of 1953, holdings of state and local securities at leading banks in this District showed slight gains. In the same period of the preceding year, holdings of such securities declined. "Country" banks in the District reported substantial gains in holdings of this type of security, exceeding by a wide margin the gains recorded a year ago.

INVESTMENTS, 1949-1953
(Fourth District reporting banks)



. . . following a decline to a four-year low in the first half of 1953, total investments rose to levels comparable to those of the last quarter of 1952. Short-term U. S. Government securities accounted for the rise during the second half of the year.

Bank Deposits The level of demand deposits for most of 1953 was generally above that of 1952, in Fourth District banks. Toward the year's end, however, the level of deposits declined appreciably below the 1952 level. For the country as a whole, the relationship to last year was similar to that of the District. Generally lower levels of business loans, plus some increase of currency in circulation, may account for the relative slackening in deposits in the final quarter.

Total debits to demand deposits, though never reaching the all-time highs of December 1952, were generally above the comparable 1952 month through November of this year. Most of the proportionately large gains were recorded in the smaller centers in the District. During the last quarter of the year, debit activity failed to show the usual seasonal increase. Deposit turnover was slightly higher throughout most of 1953 than during 1952.

Time deposits continued to expand throughout most of the year, reaching new all-time highs at leading banks in the District, week by week. In November, as in the same month in other recent years, time deposits contracted somewhat, probably associated with consumers' seasonal demand for funds, but resumed their upward movement in December.

Monetary and Credit Policy The sharp fluctuations in money-market conditions, together with Treasury financing needs, brought forth a number of important Federal Reserve actions during the year. The discount rate, open-market operations, and changes in reserve requirements were utilized towards the usual objective of promoting financial stability combined with favorable levels of business activity and living standards. A few of the highlights are indicated below.[1]

HIGHLIGHTS

1. On January 16, or shortly thereafter, the discount rate at each of the twelve Federal Reserve Banks was increased from 1¾% to 2%.
2. During the first eight weeks of 1953, roughly $1 billion of currency returned from circulation; the reserves thus created were absorbed by the reduction in Federal Reserve holdings of governments.
3. On April 8, the Treasury announced plans for raising $2 billion of new money. The new 30-year 3¼s were placed on sale on April 13.

(1) For a more detailed statement, see the 1953 *Annual Report* of the Federal Reserve Bank of Cleveland, pages 4-7. The *Report* will be available on request about January 25, 1954.

4. The Victory 2½s dipped below 90 on June 1; other issues also established long-time lows on or near that date.
5. Beginning with the first of May and extending over a ten-week period, System holdings of governments were increased by nearly $1.2 billion; most of the reserves thus released were used: (1) to reduce member bank indebtedness to the reserve banks, and (2) to meet outflow of currency.
6. On June 24, it was announced that legal reserve requirements would be reduced by $1⅛ billion in the first part of July.
7. The protracted Korean talks culminated in a truce agreement on July 26.
8. From about mid-August to the end of 1953, System holdings of governments were enlarged to accommodate the normal seasonal expansion of: (1) bank loans, and (2) currency in circulation.
9. By December 10, the Victory 2½s had recovered all of the first-half-year decline in prices. Other prime fixed-income securities had also risen appreciably from the May-June lows.

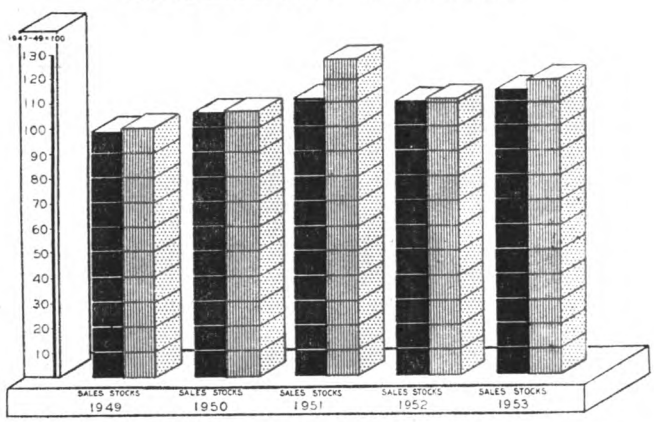
Department Store Trade in 1953

SHARING in the generally prosperous tones of business activity sounded in most other sectors of the nation's economy, Fourth District department stores in 1953 achieved the highest volume of sales on record. Such a record, insofar as it indicates continued strength in the consumer sector of the economy, is especially encouraging in the light of current and expected developments in other economic areas which would tend to place upon the consumer an increasing share of responsibility for absorbing the country's potential output of goods and services.

At least so far as output normally distributed through department stores is concerned, the results of trade in 1953 indicate a continuing brisk demand, although certain lines of merchandise have tended to lag somewhat. On the whole, the figures do provide some basis for optimism for the year ahead.

DEPARTMENT STORE SALES AND STOCKS

Annual indexes of average daily sales and end-of-month stocks—Fourth District



. . . Fourth District department stores established the best sales record ever, during 1953, as total sales advanced 3% from the previous year and bested the former all-time high set in 1951 by 2%; average end-of-month inventories during the year were somewhat higher than in 1952, but well below the record of 1951.

Total Sales Annual indexes of average daily sales and end-of-month stocks for Fourth District department stores from 1949 through 1953 are shown on an accompanying chart. Average daily sales in 1953, as indicated by the black bars on the chart, advanced 3 percent from the previous year and bested the former all-time high set in 1951 by 2 percent.

In general, seasonally adjusted indexes of average daily sales held close to the annual average in each month of 1953. The annual index for 1953, including partly estimated December figures, was about 113 (based on 1947-49 average daily sales) and for six individual months of the year, the seasonally adjusted sales index was within two points of the annual average. April was the poorest month, with adjusted sales at 105 percent of the 1947-49 average, while in August the adjusted index reached 120, the peak for the year.

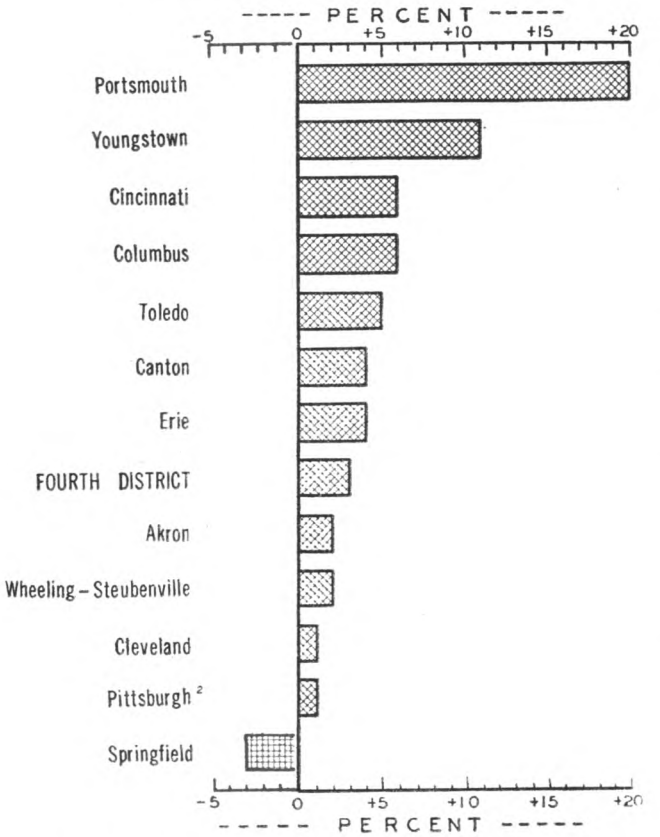
Dollar sales during each of the first nine months of 1953, except April, showed gains from the like 1952 month. In October, sales slipped below the year-ago volume for the second time in the year, but snapped back in November with a modest gain over the year-ago month. Estimates of December sales, based on totals for the early weeks of the month, indicate a decline from the high position of the 1952 month. Even so, the 1953 Christmas season may be scored as one of the best on record as far as department store sales are concerned.

The over-all gain in physical volume of sales kept pace with the rise in dollar volume during 1953. Estimates of price movements in goods sold by department stores indicate that there was less than 1 percent change in average prices as between the two years.

Inventories In spite of favorable sales records during 1953, department store inventories rose somewhat during the year. Annual indexes of average end-of-month inventories for the years 1949

DEPARTMENT STORE SALES BY CITIES

Percentage Change 1952 to 1953 [1]



. . . most major Fourth District centers showed some increase in total sales for 1953 as compared with the previous year; the gains ranged from 20% for *Portsmouth* to 1% for *Cleveland*.

1 Based on January-November data for both years.
2 Includes only January-October data.

through 1953 are shown by the red bars on the chart mentioned above. As seen on the chart, average end-of-month stocks in 1953 (with December estimated) were about 7% higher than in 1952, but were well below the record level reached in 1951.

Most of the increase in inventories came about during the middle of the year, followed by a leveling-off period in the later months. At the end of December 1952, the seasonally adjusted index of department store inventories had been 112 (based on 1947-49 average end-of-month stocks). By July 1953, the index reached 124, and remained at this level through October—with the exception of a slight dip in September.

Individual Cities The usual range of variations occurred among individual metropolitan areas in the Fourth District for which separate department store sales data are available. These are shown on an accompanying bar chart.

The largest increase in sales from the 1952 volume was posted by Portsmouth, Ohio. Sales there rose 20 percent during 1953, reflecting the increased population and purchasing power resulting from construction of atomic energy facilities in that vicinity.

The Youngstown Metropolitan Area scored the second largest increase in volume for the year, with a margin of 11 percent, and was followed by Cincinnati and Columbus with gains of 6 percent each. In the case of Youngstown, the rise was from a somewhat reduced volume in 1952, while in Columbus, the rise came on top of a similar gain for the previous year. The increase for Cincinnati marked the first appreciable gain there since 1950.

In 1953, a labor-management dispute occurred in the Pittsburgh department stores in the latter part of November and continued well into December. Sales data for the period affected by the strike are not available. The 1 percent gain for Pittsburgh stores in 1953, as shown on the chart, includes figures for only the first ten months of the year.

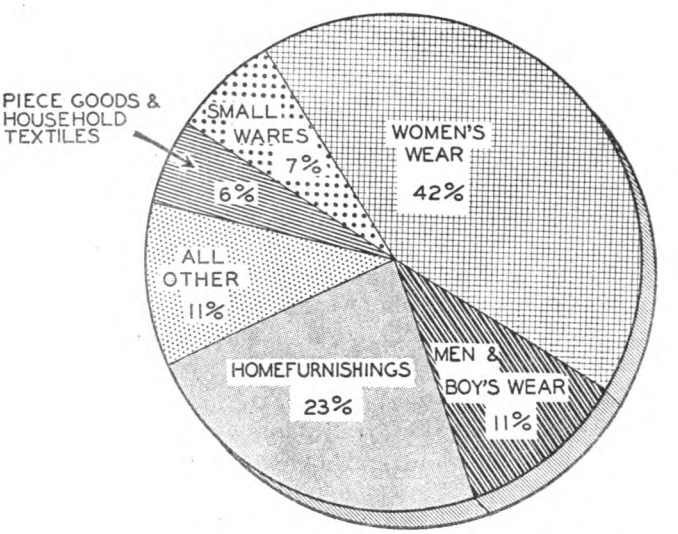
Individual Departments The 3 percent rise in total department store sales from 1952 to 1953 represented increases by most individual departments. Certain departments, however, experienced substantial sales losses between the two years.

An accompanying diagram shows the importance of sales by certain broad groups of departments relative to total department store sales. The sales dis-

COMPOSITION OF DEPARTMENT STORE SALES

Percentage Distribution of Total Sales by Major Departmental Groups [1]

(Fourth District, 1953)



. . . *women's wear* accounted for about 42% of total department store sales in 1953; *home furnishings* made up about 23% of the total.

1 Partly estimated.

SALES BY DEPARTMENTS, 1953

Percent Increase or Decrease from 1952(1)

Fourth District Department Stores

DEPARTMENT	% Change from 1952(2)
Records, Sheet Music, and Instruments	+19
Books and Magazines	+12
Gift Shop	+12
Neckwear and Scarfs	+12
Toys and Games	+10
Sporting Goods and Cameras	+10
.....	.....
.....	.....
.....	.....
Major Household Appliances	− 3
Rugs and Carpets	− 3
Silks, Velvets, and Synthetics	− 3
Women's and Children's Gloves	− 4
Women's and Misses' Coats and Suits	− 6
Furs	− 9
Radios, Phonographs, and Television	−14

(1) Departments shown are those reporting the greatest increase or decrease.

(2) Figures are for January through November.

tribution is based on 1953 sales data, although the distribution of sales among these broad classifications does not tend to change much from one year to the next.

As the diagram shows, *women's wear* accounted for about 43 percent of total department store sales in 1953, the largest portion of any of the groups. The second largest share of total sales is accounted for by the *home furnishings* group, which made up 23 percent of the total in 1953. *Men's and boys' wear* made up 11 percent of total sales in 1953, to rank as the third largest group of departments.

Some indication of the course of sales for individual departments during 1953 can be obtained from the accompanying table which lists the six departments showing the greatest increases for the year as compared with 1952, and also the six departments showing the largest declines.

At the top of the list is the *records, sheet music, and instruments* department for which sales in 1953 topped the previous year by 19 percent. Three departments, *books and magazines, gift shop,* and *neckwear and scarfs* followed with margins of 12 percent each.

Among the seven departments experiencing the largest declines in sales during 1953, the *radio, phonograph, and television* department was on the bottom of the list for the second consecutive year. The decline from the previous year for this department was 14 percent. The *furs* department and the *women's and misses' coats and suits* department posted sales declines of 9 percent and 6 percent respectively.

To a large extent, the departments posting the greatest sales increases in 1953 were those handling non-essential, or luxury items. This is especially true of the first four departments in order of percentage gains in sales. Increased sales of toys, for example, no doubt reflect the growing number of young children in the nation as a result of high birth rates during the past dozen years. The growth in sales of phonograph records, books, and sporting goods during the past two years may well be considered a reflection of the high rate of consumer income and the leisure time available to the public.

Departments handling the so-called "big ticket" items such as major appliances, radios, and television experienced sales declines in 1953 for the second consecutive year. To a large extent, these declines may reflect reaction to the sales booms in these lines in 1950 and 1951. Consumers are apparently fairly well stocked up on the large household appliances and television sets. Nevertheless, considerable encouragement is seen in the fact that many of these items purchased since the war are now approaching an age at which replacement may soon become necessary. If this becomes the case, the possibility of an upturn in appliance and television sales may become a reality in the next few years.

Instalment Credit

During each of the first five months of 1953, *instalment purchases* by Fourth District department store customers made up a larger proportion of total sales than in the like months of any previous year. Since June, the ratio of instalment sales to the total has tended to be somewhat less each month than in the like 1952 month. This falling-off in the rate of instalment buying is reflected in national figures for total consumer credit outstanding, which has shown a declining rate of increase during the later months of 1953.

Instalment-account *collection* rates fluctuated somewhat during the year. In the early months, collections as percentages of outstandings fell off to all-time lows for the individual months. Since mid-year, however, rates of instalment-account collections have tended slightly higher than in the year-ago months, although during October, collection rates reached a new low for the month. Such fluctuations probably represent responses to previous changes in commitments or in maturities rather than any significant change in consumers' readiness or ability to pay.

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President, The Cleveland Trust Company
Cleveland, Ohio

More Oil From Known Deposits

By CLYDE WILLIAMS, *President and Director, Battelle Memorial Institute*

"Bringing in" an oil well has been a popular subject in fiction. The story is usually built around several enthusiastic men drilling desperately against almost insurmountable odds to strike an oil deposit they have been anything but sure of in the first place. After numerous setbacks, and frequently at the point of exhaustion, a geyser-like gush of "black gold" suddenly roars into the skies. As the men stand in awe watching this unique spectacle, all past risks and difficulties fade into oblivion. A few story threads are subsequently tied together and the tale is ended. "Bringing in" an oil well, however, is only one chapter in the production story of getting oil from the ground. And here's why.

When a well is drilled into an oil reservoir, natural pressures tend to force the fluid mixture of oil, gas, and water into the well bore and up to the surface. Often the reservoir pressure is not sufficient to bring the fluid to the surface. In such cases, pumping operations are necessary to effect any recovery of the oil.

Even in free-flowing wells, the movement of oil to and up the well bore may become restricted or blocked by the accumulation of sand, mud, paraffin, and other impermeable materials in or around the producing area. More importantly, the unrestricted flow of oil results in premature exhaustion of the natural pressures present in the reservoir. This forces early pumping operations and reduces the ultimate recovery of oil. Furthermore, corrosive conditions in the well can cause failures in drilling and pumping equipment, the replacement costs of which frequently discourage continued production.

Overcoming such problems to recover the fullest potential from a known oil deposit has become a science in the last 25 years. During this period advances in production technology are generally credited with doubling, or even tripling, our oil resources. Production engineers point to improved techniques, materials, and equipment for drilling and pumping. These have made it possible, for example, to extend well depths to productive oil zones previously considered out of reach. A quarter of a century ago, depths of 5000 feet were uncommon and the deepest well drilled was around 8500 feet. Many wells today produce from depths below 12,000 feet, and the record drilling depth is almost 21,500 feet. Although deeper wells have resulted in higher drilling costs, research is active on revolutionary new drilling methods which, it is hoped, will eventually offset this trend.

Perhaps most important in past progress has been the development of a better understanding of the nature of oil deposits and of what must be done to obtain maximum production from them. This has brought an unusual degree of industry-wide cooperation in production research and in the adoption of conservation practices. Conservation has been a key factor in recovering the greatest amount of oil from a given field through controlling the spacing and production rates of all wells in that field. Research has brought steadily expanding knowledge on how we can recover the most oil most efficiently from individual reservoirs, whether they be new reservoirs, ones that have ceased to produce, or those that are not producing enough to be profitable.

Where natural pressures originally associated with a deposit have become depleted, production engineers have known, for many years, that the flow of oil can be restored by replacing the pressure in the reservoir. This is usually accomplished by flooding the reservoir with water, or by injecting air or gas into it. After primary recovery has ceased to be profitable, these methods have been most generally employed for secondary recovery. Such recoveries represent about six per cent of the total value of the country's annual oil output, according to the latest available estimate.

In recent years, a number of new techniques for stimulating oil flow in a reservoir have been investigated by numerous organizations, including the U. S. Bureau of Mines, and a dozen or more leading oil companies. For example, a mixture of hydrochloric acid and organic sulfonic acid, by removing blocking materials in sand and limestone reservoirs, has proved effective in increasing oil production. Experiments have shown that a carbon dioxide solution in the water-flooding of limestone reservoirs will yield a higher recovery of oil than plain water. Considerable success has been achieved with "hydraulic facturing" methods. Kerosene-acid jel, mixed with a special round-grained sand, has been pumped into the Big Foot Field in south Texas and production has reportedly risen from 40,000 to 105,000 barrels monthly. Plastics have been used to stimulate the flow of oil in reservoirs where loose, clogging sands need a binding material to increase their permeability. "In situ combustion," or the controlled firing of oil in a reservoir, is being studied as a method of recovering "unrecoverable" heavy oils, which in the U. S. alone probably exceed four billion barrels. These and other methods of reservoir conditioning, including the use of detergents and explosives, are believed to hold considerable promise in improving future primary and secondary recovery practices.

In spite of remarkable past progress, the story of petroleum production engineering is an unfinished saga. Authorities estimate that an average of about 60 per cent of the oil originally present is still being left behind in the process of production. According to one expert, it is possible that the oil otherwise lost but technically recoverable by known secondary recovery methods could amount to 14 billion barrels. Greater interest is being shown by petroleum technologists in bringing into commercial supply larger quantities of this vast, so-called "unrecoverable" reserve. Their interest is being stimulated by the nation's increasing needs for petroleum, by the high costs of finding and developing new deposits, and by the apparent trend toward rising crude oil prices which tends to make expanded secondary recovery operations profitable.

Over the next 25 years, a higher percentage of oil recovery from known deposits should result from advances in production technology, including better drilling and pumping equipment. As the finding and developing of new deposits become more costly, these advances should account for a larger and larger share of domestic petroleum production.

Editor's Note—While the views expressed on this page are not necessarily those of this bank, the *Monthly Business Review* is pleased to make this space available for the discussion of significant developments in industrial research.