MONTHLY
Business Review

JUNE 1951
CONTENTS

FINANCE • INDUSTRY • AGRICULTURE • TRADE
FOURTH FEDERAL RESERVE DISTRICT

Vol. 33—No. 6 Federal Reserve Bank of Cleveland Cleveland 1, Ohio

Residential Construction Boom Begins to Deflate

EVER SINCE October 12, 1950, when restrictions were placed on the terms of credit for new one- and two-family residences by Federal Reserve's Regulation X and the companion regulations of FHA and VA, speculation has been rife as to their probable effect upon home building activity in 1951.

The announced objective of the restrictions was to reduce the number of new housing starts this year to no more than 850,000 units or about two-fifths less than the record 1,400,000 starts in 1950. Some construction authorities predicted early this year that no more than 400,000 units would be commenced in 1951 while other estimates range upward to 1,000,000. The lowest estimates are already clearly out of line since some 350,000 units were begun in the first four months.

The unusually wide range in the 1951 forecasts is due in part to the uncertainty of the times. In the past it has usually been possible to assume that supplies of materials and labor would be adequate, and that the amount of residential building undertaken would reflect the collective judgement of contractors as to the current need for housing and the ability of customers to finance their purchases. Unfortunately, the supply side of the picture is extremely uncertain and the demand factors for housing are likewise beclouded by recent changes in credit terms.

The Supply Factors On the supply side there is a real question as to how much material will be available for residential building, especially in the second half of the year. Apparently there will be adequate supplies of lumber, roofing materials, gypsum board, cement, brick, tile, concrete block, insulation, paint, and glass. The metals offer the big stumbling block. Steel consumption for most civilian products was cut back 20 percent in the second quarter from the first half of 1950 by NPA and it is indicated that this cut will be deepened in the third and fourth quarters. Likewise, the use of lead, copper, tin, zinc, and aluminum has been curtailed and their incorporation in many building components completely prohibited.

Even if it were possible to estimate at this time exactly how much these restrictions would reduce building material production in the second half of the year, it is impossible to judge the effect upon new residential construction starts because of at least three other unknowns. First, contractors may find adequate substitutes; second, the size of inventories already in the hands of building supply companies and individual contractors is not known — and these are probably quite large; and third, the amount of diversion that can take place from supplies that ordinarily would be used for the maintenance and repair of existing properties is indeterminable. Taking all of these factors into consideration, material supply will probably support close to a million starts in 1951.

Interim financing for builders also poses a hurdle that will be met with varying degrees of success. In this District it is already evident that lenders are using a great deal of caution and selectivity in granting credit to contractors. Well established builders with good records are being taken care of by their cus-

tomary financing agencies. But, where a good builder last year at the beginning of the season was able to obtain a commitment of 100 units, he was fortunate to get a commitment of half that size in the current year. The lenders' attitude has been to proceed with caution, to see how the supply of materials is maintained and to determine whether the completed units are readily sold. If conditions appear satisfactory, additional commitments will be made. Temporary loan funds, however, are costing the contractor more than they did a year ago.

On the other hand, contractors who do not have well established relations with their suppliers, or whose records are blemished or unknown, are having great difficulty in arranging commitments with lending agencies. Many operators will undoubtedly drop out of the picture in 1951.

The Demand Factors Turning to the demand side for housing there are several factors that must be carefully weighed. Nearly all of them relate to the availability of credit or the possible effect of the recent changes in credit terms upon the demand for housing.

It has been estimated that financial institutions of all kinds had about 400,000 commitments outstanding on October 12, 1950. These were not affected by the new credit regulations, and so gave the builders holding them a brief reprieve before the stricter terms had to be complied with. Members of the National Association of Home Builders report that new residential building up to now has depended primarily upon these pre-regulation commitments. They anticipate that these commitments will be exhausted by mid-year and that there will ensue as a consequence a sharp drop in starts.

The 400,000 estimate as to the number of pre-regulation commitments is only a guess since an actual count was never made. Likewise, no actual tabulation has been made of the terms of financing since October 12 as to how many transactions were or were not exempt from credit control. Despite this vagueness, one construction service estimated that by the end of March, only 15,000 commitments on one- to four-family units and less than 125,000 on multi-family projects remained on the books. Since 440,000 dwelling units were started in the November through March 1951 period according to the Bureau of Labor Statistics, the deduction could be made that 180,000 units were financed under the new credit terms in this five-month period. The 88,000 starts in April further reduced the pool of exemptions.

Importance of Federal Aid The feeling that the new credit restrictions will drastically reduce the demand for housing in 1951 is probably due to the growth in importance over the years of FHA financing, and more recently, of VA financing. Both of these federal agencies have trended in the direction of more and more liberal credit terms. In the 1939-41 period FHA starts accounted for one-third of the total starts reported by the Bureau of Labor Statistics. In 1950, FHA starts were 35 percent of the total and VA starts took in another 15 percent for a total of 50 percent for the two agencies combined. Requests for VA appraisals and FHA mortgage applications are reported this spring to be at sharply reduced levels.

Much of the lending under Federal guarantees has been of the marginal type, in the sense that many of the buyers could not meet conventional bank mortgage terms which require at least a 40 percent downpayment with a maturity of 10 years provided that instalments were large enough to amortize 40 percent of the loan in that period. The new credit regulations have scarcely touched conventional lending practices, and the question centers on how much they affect the FHA and VA type loans.

A clue to this may be found in a recent study entitled "New Home Financing and Characteristics in 15 Metropolitan Areas." This survey was made by the Bureau of Labor Statistics and covered new one-family houses completed during the last half of 1949 and purchased by the end of May 1950. The survey was made in the 15 largest metropolitan areas in the country and covered nearly 78,000 transactions. It was found that 19,905 of these houses, or 26 percent, were sold without any downpayment. The inference can be made that elimination of no-downpayment selling would automatically reduce housing volume by 26 percent.

Yet it is probably true that many of these no-downpayment buyers could have raised a downpayment if the lenders had insisted upon it. This can be illustrated by taking two extremes. In Atlanta, Georgia, only 43 percent of all mortgaged houses were sold with a downpayment whereas in Cleveland, Ohio, and Pittsburgh, Pennsylvania, 97 percent and 93 percent, respectively, were so sold. The firmness of lending policy has much to do with the terms of finance. Next it should also be pointed out that this survey was made in the major strongholds of federal guarantees and not in the medium-sized cities and villages where lenders are more conservative and most loans are made on a conventional basis. Inclusion of these areas conceivably would substantially reduce the proportion of no-downpayment selling.

Builders and lenders, at least in the Fourth Federal Reserve District, have reported since last fall a marked trend away from FHA and VA financing. A new kind of buyer apparently has entered the market who has ample funds to pay cash or to meet regular bank terms. Typically, he is the buyer who has been waiting since 1945 for prices to come down before building or buying, and recent events have convinced him that prices are not going to recede in the foresee-

able future. It is quite likely that the emergence of this type of buyer will offset to some extent those who drop out of the market because of insufficient funds.

New Credit Terms Will Pinch

The accompanying table shows the percentage distribution of downpayments by housing price class that prevailed in the Cleveland Metropolitan area in the last half of 1949.

It is possible to use this table to make some very rough estimates as to the proportions of the transactions that would have been eliminated under present credit regulations if they had been in effect in the latter half of 1949, under the assumption that each buyer paid as much down as his resources permitted. Exact computation is complicated by the broad price spreads in each class of housing and by the different requirements of Regulation X, the FHA and VA.

For example, in the $5,000 to $9,500 price class, the downpayment requirement for veterans will vary from 5 percent for the $5,000 unit to 12 percent for the $9,500 unit. Under FHA and Regulation X, the downpayment would vary from 10 percent to 22 percent. Using the stricter FHA and Regulation X credit terms and assuming a required downpayment of 10 percent, then about 43 percent of the buyers of the houses valued at less than $9,500 would have been eliminated, or nearly 4 percent of the sample group. If a downpayment requirement of 22 percent is assumed, then at least 54 percent of this group would have been eliminated.

If this procedure is followed for all of the price classes shown in the table, 30 percent of the transactions would not have met the minimum downpayment requirements if calculated at the low end of the price bracket and 39 percent of the transactions would not have been consummated if the downpayments were calculated at the upper limit of each price bracket. On an average basis, perhaps 35 percent of the sample group would not have been able to close their transactions. If the credit requirements of the VA were used, about 25 percent of the buyers would not have had sufficient downpayments.

More than half (56 percent) of the home buyers in the Cleveland sample group were veterans of World War II. It was this group that provided the bulk of the low downpayment transactions with 28 percent paying down 10 percent or less and only 22 percent made downpayments of more than 35 percent. On the other hand, 75 percent of the non-World War II veterans paid down more than 35 percent. It is also interesting to note that only about two-thirds of the veteran group took advantage of straight VA financing or FHA-VA combination first and second mortgages, and 7 percent of the veterans were able to pay the full cash price for their homes. In the nonveteran sample group, 11 percent of the buyers did not need to borrow for home purchase.

For the Greater Cleveland home market, it might be assumed that the new credit restrictions will not curtail new buildings as much as some have predicted. In fact, a recent survey of builders and lenders indicates that new housing is selling well and buyers seem to be able to raise easily their downpayments. This condition also seems to prevail in the small towns and cities of the District. Cleveland, however, may prove to be a special case. The B.L.S. study of 15 metropolitan areas showed that the average initial equity in all mortgaged homes in Cleveland was 39 percent, the highest in the nation, followed by Chicago with an average of 31 percent. Pittsburgh also was a leader in this respect with downpayments averaging 27 percent. On the other hand, a very important area such as Los Angeles, averaged only 16 percent. The lowest average occurred in Miami with 8 percent.

Table I

PERCENT DISTRIBUTION OF NEW MORTGAGE-FINANCED 1-FAMILY HOUSES IN THE CLEVELAND METROPOLITAN AREA

Completed between July-December 1949

PRICE CLASS	All Mtg. Financed Homes		Percent of Houses Bought with Initial Equity of							
	No.	%	Total	0%	1-5%	6-10%	11-15%	16-25%	26-35%	over 35%
$5,000 to $9,499	195	8%	100%	16%	11%	16%	11%	6%	11%	29%
9,500 — 12,499	895	38	100	2	11	13	8	17	24	25
12,500 — 14,499	405	17	100	3	5	5	5	13	21	48
14,500 — 16,499	320	13	100	—	3	—	—	17	24	56
16,500 — 18,499	175	7	100	—	—	—	—	7	7	86
18,500 and over	420	17	100	—	5	—	—	10	10	75
Total	**2,410**	**100**	**100**	**3**	**7**	**7**	**5**	**14**	**19**	**45**

Source: Bureau of Labor Statistics

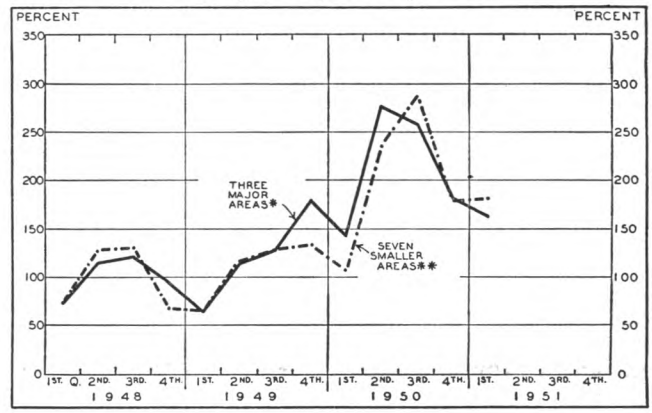
Change in Money Market The April change in Federal Reserve open market policy which saw the abandonment of fixed peg prices for Government securities has introduced an additional complicating factor in the demand for housing. Heretofore, a substantial supply of real estate mortgage money was provided by lenders who sold Government bonds to the Federal Reserve at premium prices and then invested the proceeds in real estate mortgages. Since the first part of April, the Government bond market has been permitted to drift downward in an orderly fashion as the Federal Reserve withdrew to allow the market to seek a lower level. As a consequence, a lender must take a loss if he wishes to dispose of bonds to make additional real estate loans.

The effect, as might have been expected, has been to dry up to a considerable extent this source of mortgage funds. For all practical purposes, the current yield of about 2¾ percent on Government bonds is just as attractive, if not more so, than a 4 percent VA real estate mortgage and almost equal to a 4¼ percent FHA guaranteed loan. Federal guaranteed mortgage loans have thus lost to a considerable degree their attractiveness and there is a pronounced tendency to shift available funds into conventional and nonguaranteed mortgage loans. The extent of this shift, however, cannot as yet be measured. At the moment, however, it appears that the general tightening of the money market may have a more pronounced effect upon residential building activity than the restrictions imposed by regulation on the terms of credit.

Construction Still High It is difficult to find figures for the Fourth Federal Reserve District to support the contention that real estate credit controls have had any great effect upon residential construction activity. The most reliable District data are provided by the F. W. Dodge Corporation for the value of contracts awarded. Their figures indicate that fourth quarter volume in 1950 was 9 percent ahead of the same quarter in 1949 while the first quarter of 1951 was 28 percent ahead of the comparable period in 1950. Moreover, the seasonal decline in building activity from the final 3 months of 1950 to the first quarter of 1951 was less than half the drop experienced a year ago.

Even in the absence of any controls on building activity, it could not be expected that the phenomenal pace of 1950 would be maintained this year. Value of residential contracts awarded in 1950 were nearly 80 percent ahead of the previous year and there were signs that the volume of construction starts had outrun the available supplies of material and labor. Many projects came to a halt last winter due to lack of materials or labor or both. Unfavorable weather further delayed the completion of many of the 1950 starts until only recently. It is logical to expect contractors to proceed with more caution in 1951 in order to avoid some of the costly delays experienced last year and to test the market's ability to absorb the finished units.

RESIDENTIAL CONSTRUCTION IN FOURTH DISTRICT METROPOLITAN AREAS
Index of Value of Contract Awards by Quarters 1948-1951
1948 Quarterly Average = 100



. . . in general both large and small metropolitan areas participated equally in the recent construction boom. During the past nine months, however, volume has been holding up better in the seven smaller areas.

*** Pittsburgh, Cleveland, and Cincinnati**
**** Akron, Canton, Columbus, Dayton, Erie, Toledo, and Youngstown.**
Source: F. W. Dodge Corporation

On the basis of April contract awards for the District it is apparent that a leveling off is beginning to take place. Awards were only three percent above the previous month whereas a year ago the March-April increase was an unusual 44 percent. As a consequence, April contracts were 14 percent under the year-ago figure. Measured by the number of new residential starts, the District decline was not as large as that experienced by the entire U. S. April starts in the nation dropped contraseasonally by 5 percent and were 34 percent lower than a year ago.

District Trends The trend of residential construction for recent years is depicted by an adjacent chart. The chart shows an index of contract awards for the three major metropolitan areas combined (Pittsburgh, Cleveland and Cincinnati) and for seven smaller metropolitan areas combined (Akron, Canton, Columbus, Dayton, Toledo, Youngstown, and Erie, Pennsylvania). These 10 metropolitan areas account for about four-fifths of District construction volume as reported by the F. W. Dodge Corporation.*

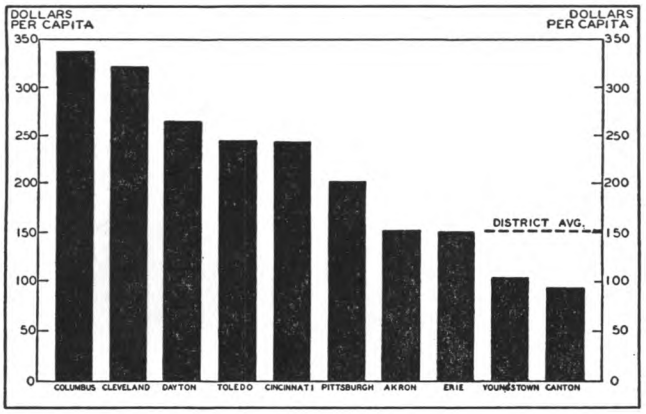
* Metropolitan areas as defined by the F. W. Dodge Corporation refer to the entire county where the major city named is located except for: Cincinnati, which includes Hamilton county, Ohio and Boone, Campbell, and Kenton counties, Kentucky; Cleveland, which includes Cuyahoga and Lake counties; Pittsburgh, which includes Allegheny, Beaver, and Westmoreland counties; and, Youngstown, which includes Mahoning and Trumbull counties, Ohio, and Lawrence county, Pennsylvania.

It is particularly interesting to note that construction in the seven smaller areas is holding up better than in the three largest cities. Contracts awarded in the smaller cities actually rose contraseasonally from the last quarter of 1950 to the first quarter of this year and were 68 percent ahead of the year-ago period. In Pittsburgh, Cleveland, and Cincinnati, combined volume in the first three months of 1951 was lower than in the preceding period and only 13 percent higher than in 1950. These divergent trends lend support to the thesis that credit controls are going to have more effect in the large cities where FHA and VA loans are very important, but will not be so noticeable in the smaller communities.

Decentralization of industry will also operate in the direction of sustaining residential building activity in the smaller towns to house the anticipated influx of labor. Reports have been received of sizeable defense installations or expansion of industry with new branch plants in such town as Lima, Newark, Marion, Elyria, Dayton, Bucyrus, and others.

Construction in Major Cities Due to the fact that each of the major metropolitan areas varies in size, rate of growth, and need for new housing, it is difficult to make direct meaningful comparisons of the number of new units or value of contracts awarded in each community. The adjacent bar chart reduces one measure of building activity, i.e., value of residential contract awards, to a per capita basis. The chart shows for each of 10 metropolitan areas the value of total F. W. Dodge Corporation residential contract awards from 1946 through 1950, divided by 1950 population.

PER CAPITA EXPENDITURE FOR RESIDENTIAL CONSTRUCTION
1946-1950 Inclusive



. . . in the Fourth District as a whole, expenditures on residential construction were nearly $151 per capita for the five-year period 1946-1950. Metropolitan areas, however, ranged from $93 in Canton to $338 in Columbus.

Source: F. W. Dodge Corporation and Bureau of the Census

By this measure of construction, Columbus leads the District with an investment of $338 per capita during the past 5 years followed by Cleveland with an investment of $323. Canton, with a per capita valuation of only $93 was the lowest of this 10-city group.

Another method of comparing inter-city construction activity is to relate the net increase in population in each, to the actual increase in the number of dwelling units. This procedure was followed using data derived from the recent Census of Housing and Census of Population. The increase in the number of dwelling units in each city was divided by the respective increases in population and the quotients multiplied by 100. This end figure then is the number of dwelling units added in each city per increase of 100 persons in the past decade. In Table II each of the 10 cities is ranked in descending order of activity.

According to this measuring device, Pittsburgh is the leader in the District with 65 additional dwelling units for each 100 persons added to the metropolitan population, or about two-thirds of a house for each additional person. Columbus ranks ninth in this scale of comparison with 34 additional dwelling units for each 100 increase in population, whereas it ranked first in value of new construction per capita. This difference is explained by the very rapid growth in population which Columbus experienced between 1940 and 1950. Canton, which had the smallest per capita investment in the previous comparison, ranks in the upper half of the District in terms of adding housing for its increased population.

Is Supply Catching Up?

In view of the vast amount of new residential building in the last decade, particularly since 1945, and the modernization and conversion of older single family or commercial properties into multi-family

Table II

CHANGES IN POPULATION VS. HOUSING
1940-1950

Metropolitan Area	Increase in No. of Persons	Increase in No. of Dwelling Units	Increase in D.U. Per 100 Inc. in Pop.
Pittsburgh	131,904	85,552	65
Youngstown	52,221	28,403	54
Cleveland	198,241	84,378	43
Canton	48,307	20,133	42
Akron	70,627	28,969	41
Toledo	51,218	20,451	40
Erie	38,499	14,945	39
Dayton	102,961	36,908	36
Columbus	114,698	39,441	34
Cincinnati	119,553	39,575	33

units, the question is frequently posed, when will the housing shortage be overcome? Put another way, are too many houses being built and will this year's output glut the market? The answer still is not clear.

The following tables derived from the 1950 Census of Housing and the 1950 Census of Population provide in part the answers to the above question.

Table III shows in detail the change in District population from Apri 1, 1940 to April 1, 1950. The total number of people in the area is now close to 13 million, an increase of 10.4 percent from the 11.8 million persons living there in 1940. The rate of increase is considerably below the 14.5 percent rate experienced by the entire United States.

When population changes are analyzed by broad geographical classifications, divergent trends are immediately apparent. Ohio, all of which is in the District, increased in population by 15.0 percent in the past decade to a total of 7.9 million persons. The 19 western Pennsylvania counties in the District gained 5.6 percent and about seven-tenths of this increase took place in the Pittsburgh metropolitan area. The 56 counties in eastern Kentucky had practically no change in population during the past 10 years while the District's 6 Panhandle counties in West Virginia dropped 2.3 percent in total population.

The rate and direction of population change as between the metropolitan areas and all other parts of the District is shown in the lower part of the table.

Changes in Population

In general, the cities with a 1940 count of between 200,000 and 400,000 showed the most rapid rates of growth. With the exception of Toledo, all had gains in excess of 20 percent with Dayton leading the District with a rise of 35 percent. Cleveland, Ohio's largest metropolitan area, added 15.6 percent to its population while Cincinnati was up 15 percent. The largest metropolitan area in the District (Pittsburgh) gained 7 percent. In sharp contrast to these increases scored by the metropolitan centers was the 5 percent advance experienced by the rural areas and smaller

(CONTINUED ON PAGE 9)

Table III

FOURTH DISTRICT POPULATION

	No. of Counties	1950	1940	Net Change	Percent Change
Kentucky	56	1,383,816	1,379,425	+ 4,391	+ 0.3%
Ohio	88(All)	7,946,627	6,907,612	+ 1,039,015	+15.0
Pennsylvania	19	3,501,481	3,317,201	+ 184,280	+ 5.6
West Virginia	6	200,546	205,290	— 4,744	— 2.3
Fourth District		13,032,470	11,809,528	+ 1,222,942	+10.4
United States		150,697,361	131,669,275	+19,028,086	+14.5
Fourth District as percent of U.S.		8.6%	9.0%	6.4%	———
Metropolitan Area*					
Akron	1	410,032	339,405	+ 70,627	+20.8
Canton	1	283,194	234,887	+ 48,307	+20.6
Cincinnati	4	917,417	797,864	+ 119,553	+15.0
Cleveland	2	1,465,511	1,267,270	+ 198,241	+15.6
Columbus	1	503,410	388,712	+ 114,698	+29.5
Dayton	1	398,441	295,480	+ 102,961	+34.8
Erie	1	219,388	180,889	+ 38,499	+21.3
Pittsburgh	3	2,003,608	1,871,704	+ 131,904	+ 7.0
Toledo	1	395,551	344,333	+ 51,218	+14.9
Youngstown	3	521,664	469,443	+ 52,221	+11.1
Total 10 Metropolitan Areas		7,118,216	6,189,987	+ 928,229	+15.0
10 Areas as percent of Fourth District		54.6%	52.4%	75.9%	———
Balance of Fourth District		5,914,254	5,619,541	+ 294,713	+ 5.2
Balance of District as percent of Fourth District		45.4%	47.6%	24.1%	———

Source: April 1, 1950 and 1940, Census of Population

* As defined by F. W. Dodge Corporation

Program for Voluntary Credit Restraint

TO COMBAT the inflationary pressures arising from the imposition of a huge defense program on an economy whose resources were already in a state of high employment, many of the weapons in the democratic arsenal have been brought to bear. These range from direct physical controls on prices, wages and materials, through a variety of fiscal controls (chiefly taxes) to the less spectacular monetary restraints, both quantitative and qualitative. Among the last-mentioned type of controls the Program For Voluntary Credit Restraint is a newcomer—new in the sense that it now has formal shape and Congressional backing. Voluntary restraints on credit are not unknown, for as recently as 1948, similar objectives were set by the American Bankers Association.

Authority for the recently organized program, however, derives from the Defense Production Act of 1950 which states that the President may "consult with representatives of industry, business, financing, agriculture, labor and other interests, with a view to encouraging the making, by such persons with the approval by the President, of voluntary agreements and programs to further the objectives of this Act." Also under the authority of the same Act, the President delegated to the Board of Governors of the Federal Reserve System his powers with respect to financing.

On March 9, 1951, representatives of commercial banks, investment banks, insurance companies and the Federal Reserve System, issued a statement of the principles guiding the Program and the procedures established for carrying it out. At the same time, with the approval of the Attorney General, all financing institutions in the United States were requested "to act, and to refrain from acting" in accord with the Program.

Rationale of the Program

The basic philosophy of the Program, as enunciated in the statement of principles, is that ultimately the most desirable way of fulfilling the needs of the defense program and of curbing inflation is to expand production. Increased output will minimize the damage to incentives and to the standard of living which is apt to result from the diversion of resources from civilian to military use.

In the process of increasing output, more income is generated than is matched by goods on which that income can be spent, consequently leading to pressure on prices. This inflationary pressure can, of course, be offset by increased taxation and increased private saving. But to the extent that the desired increase in production is not financed by current savings and an excess of Government receipts over Government expenditures, an expansion of bank lending, and consequently the money supply is required. Some loans will be needed to finance directly the production of defense material. Others will be needed to maintain or expand the output of goods and services for civilian consumption. But there are, and will be, demands for other loans which will not be used to add to the over-all physical production of our economy.

It is the purpose of the Program for Voluntary Credit Restraint to induce a strong cooperative effort among lenders to hold to a minimum the amount of nonproductive loans to business, and to restrain borrowing by state and municipal authorities for projects which can be postponed without damage to the defense program. To achieve the objectives of the Program, lenders should be satisfied that each loan "commensurately increase(s) or maintains(s) production, processing and distribution of essential goods and services."[1/] It is obvious that interpretations of this standard may differ widely, but this is inevitable in any general rule when applied to such a complex field of activity as lending. Certain examples have been given of loans which would be considered proper or improper. Types of loans which would be considered justifiable include direct and indirect defense production loans, and loans "for the production, processing and orderly distribution of agricultural and other staple products . . . and of goods and services supplying the essential day-to-day needs of the country." Loans needed to augment working capital as a result of price and wage increases are also deemed to fall within the propriety of the Program if they will help to achieve the purposes outlined above. In addition, short-term financing of securities dealers in their normal operations or to assist in the issuance and placement of new stock, for such purposes, is considered legitimate.

Types of loans which it is hoped to discourage fall into the following two broad categories. First, loans to retire corporate equities held by the public, and loans to acquire corporate equities or existing companies and plants which would not result in an overall increase of production. Secondly, loans for speculative investments or purchases, such as inventory accumulation or purchases of nonessential real estate and plant facilities.

Procedure and Organization

The first step to implement the Program was the establishment of a 12-man Committee, comprising four representatives each of commercial banks, investment bankers and insurance companies, under the chairmanship of Oliver S. Powell, member of the Board of Governors of the Federal Reserve System. In May, the Committee was expanded to include two

1/ Source — Statement of Principles; Program for Voluntary Credit Restraint, March 9, 1951.

representatives each of mutual savings banks and savings and loan associations. The Committee's functions are to review the Program, to suggest modifications if necessary, to disseminate pertinent information, and to establish representative regional subcommittees for each type of financing institution participating in the Program. Members of the regional committee dealing with commercial banking problems in the Fourth District are as follows:

John K. Thompson (*Chairman*) President, The Union Bank of Commerce Company, Cleveland, Ohio

W. A. Mitchell, President, The Central Trust Company, Cincinnati, Ohio

Francis H. Beam, Senior Vice President, The National City Bank of Cleveland, Cleveland, Ohio

Jonathan S. Raymond, Vice President, Mellon National Bank and Trust Company, Pittsburgh, Pennsylvania

Robert C. Downie, President, Peoples First National Bank and Trust Company, Pittsburgh, Pennsylvania

E. S. Patterson, President, First National Bank of Akron, Akron, Ohio

William H. Fletcher, First Vice President, Federal Reserve Bank of Cleveland, Cleveland, Ohio

The functions of the regional committees are to transmit information concerning the program to participants, to assist lenders who desire to consult them in order to determine whether or not specific loans are proper or improper, and to report to the central Committee concerning their actions and the types of cases which arise. Neither the regional nor the central committees, however, have power to compel an individual lender to comply with their decision as to the propriety of any loan.

Operation of the Program The national Committee has issued several bulletins focusing attention on particular types of credit activity which it considered to be of major importance. These bulletins provide lenders with more specific guidance to facilitate their compliance with the anti-inflationary objectives of the Program.

Bulletin No. 1 dated March 15, 1951 stressed the contribution of post-Korean inventory accumulation to rising prices and to the $11 billion (22 percent) expansion of bank loans in the first 9 months of limited war. It advocated, therefore, that financing institutions should:

"(1) Refrain from financing inventory increases above normal levels relative to sales, or reasonable requirements by other conservative yardsticks.

(2) Encourage borrowers who already have excess inventories to bring these commitments and inventory positions in line as promptly as is reasonably practical, thereby reducing the amount of credit being used in this manner."

The second bulletin, issued on April 23, enlarged on the inflationary potential of the financing of an anticipated record volume of business expenditures on plant and equipment during 1951. However, only about half of the planned $24 billion of capital investment outlays is classed as defense or defense-supporting, such as expansion of capacity in steel, aluminum, petroleum and electric power industries, and additions to railroad rolling stock.

With regard to the large volume of capital expenditures which are not classified as essential by the Government, or which do not fall directly into the defense or defense-supporting categories, it is suggested that financing institutions examine the projected outlays and refrain from lending funds if the expenditures are for purposes similar to the following:

"(1) Construction of facilities to improve the competitive position of an individual producer of nonessential goods.

(2) Expansion and modernization expenditures of concerns in distribution or service lines where the distribution or service is not defense-supporting.

(3) Expansion and modernization programs for the manufacture of consumer goods not related to the defense effort."

The most recent pronouncement of the Committee on May 3, 1951, concerns borrowing by state and local governments. Sales of public securities since the outbreak of the Korean War have aggregated $2 billion, raising the total of outstanding state and municipal debt to a record $22 billion. To assist in confining state and local government expenditure to projects necessary for the preservation of public health and safety or for defense, the Committee listed certain types of expenditures which it considers should be postponed. Particularly the Committee recommends that no long-term financing in excess of current revenues be made available for these and other similar purposes:

"(1) Replacement of any existing facilities that can continue to perform their function during the emergency period.

(2) Construction of facilities of types not recommended by the Defense Production Administration — such as recreational facilities and war memorials.

(3) Acquisition of sites or rights-of-way not immediately needed.

(4) Purchase of privately-owned utilities by municipalities, which involves borrowing to replace equity capital."

Careful screening of the volume and purpose of new borrowing is urged, and soldiers' bonus issues are cited as a specific example of borrowing which adds directly to the inflationary forces. Futhermore, Defense Mobilization Director Wilson requested public authorities to submit proposed financing of $1,000,000 or more to the regional committees for judgement, and the hope has been expressed that financing institutions, particularly investment bankers, will not participate in public security transactions unless the issues are approved by a regional committee.

In addition, the cooperation of banks, particularly the large city banks, has been enlisted to secure detailed information on large loans. Data concerning the purpose of loans—whether for defense, defense-supporting, or nondefense purposes—as well as the business of the borrower are prepared weekly by reporting banks and submitted to the Reserve Banks for tabulation. The reporting procedure has not been in operation long enough for any well defined trends to be perceived, but when the comprehensive information on the type and purpose of commercial and industrial borrowing has been available for some time, it should prove of great assistance to the central and regional committees in formulating new policies and techniques to enhance the possibilities of successful achievement of the aims of the Program.

RESIDENTIAL CONSTRUCTION BOOM

(CONTINUED FROM PAGE 6)

cities combined. The over-all trend in the District in the past decade has thus been to concentrate a larger proportion of the population in the metropolitan centers.

Population growth, accentuated by migration to the cities, has of course greatly increased the need for housing. Table IV shows the increases in the number of dwelling units that have taken place in the past decade, and the bar chart compares the increases in housing units with the growth in population.

The table shows the actual count of dwelling units in each census year. The difference between the periods is a *net* increase; that is, existing housing plus new structures and conversions less demolitions and destruction or loss of units through fire and so forth in the intervening years.

In every case, in every community, there has been a larger percentage increase in the number of dwelling units than in the growth of population. Dayton, for example, experienced a growth of 35 percent in the number of people but the supply of housing rose 44 percent. Cleveland's population grew 15.6 percent but its housing expanded by 23 percent. Pittsburgh added 7.0 percent to the number of residents but dwelling units expanded nearly 18 percent.

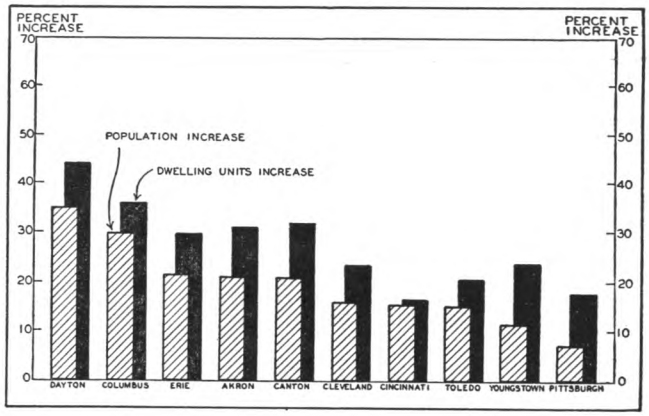
Increase in Families At first glance it would appear that there has been an excessive amount of residential building in the past decade, especially in view of the vacancy ratio that prevailed in 1940, and that there should be an even larger number of vacancies at the present time. Simple observation, however, indicates that such a situation does not prevail and that the vacancy ratio is very low. The answer to this seeming paradox is found in the fact that the demand and need for housing is not controlled by the *number of people* in a community but by the *number of families.*

The most recent Census of Housing and Census of Population indicate that while population in households rose in the U. S. in the last decade by 13 percent, the number of households or families jumped nearly 22 percent. The unprecedented spurt in family formation was a direct result of the stimuli provided by the war and high incomes which were reflected in the sharp upturn in the marriage rate. The demand for housing was further stimulated by the continued downward drift in the size of families which dropped from 3.7 persons in 1940 to 3.4 persons in 1950, or about 8 percent.

POPULATION GROWTH VS. INCREASE IN HOUSING UNITS

Selected Metropolitan Areas

Percentage Change 1940-1950



. . . in each metropolitan area, the number of dwelling units increased more rapidly than the population, during the decade 1940-1950. In Cincinnati the margin was only nominal, whereas in Pittsburgh the disparity was most marked.

Source: 1950 Census of Population and 1950 Census of Housing

Detailed figures are not yet available from the Census on the growth in the number of households by metropolitan areas in the District. For the State of Ohio, however, preliminary estimates show an increase of 22.8 percent in the number of households as compared with the 22.2 percent increase in the number of dwelling units. On this basis, new home construction lost a little ground in the past decade instead of the gain indicated by comparing population with housing.

The Cleveland Real Property Inventory report shows a 22 percent increase in the number of families in Cuyahoga County from October 1940 to October 1950. This figure may be used for a rough comparison with the Census report of a 23 percent increase in dwelling units for the Cleveland Metropolitan area which includes both Cuyahoga and Lake Counties. Again, gains in dwelling units and family formation are about in balance.

Over the 10-year span it would thus appear that the housing industry has been able to keep pace rather well with the country's needs. This includes a period during the last war when building activity was at a minimum so that considerable "catching up" was involved since 1945. One other fact should be noted, however. The number of new dwelling units started has increased each year since 1945 and reached a peak in 1950. On the other hand, family formation reached a peak in 1946 and has dropped steadily since that year. The number of marriages in 1949 was about 31 percent less than in 1946 and 13 percent less than in 1948. Thus, the number of new families formed has been diminishing steadily each year whereas the number of new dwelling units has been increasing. It is quite possible that the nation is much closer to being caught up on its housing needs than is generally realized, and that the need for new housing is on the verge of shrinkage to a replacement and net new family formation basis. This would amount roughly to about one-half the number of starts that took place in 1950.

Table IV

FOURTH DISTRICT DWELLING UNITS

	No. of Counties	Preliminary 1950	1940	Net Addition Since 1940	Percent Change From 1940	Avg. Number Persons Per Dwelling Unit	
						1950	1940
Kentucky	56	365,371	331,541	33,830	+10.2%	3.8	4.2
Ohio	88(All)	2,416,356	1,977,693	438,663	+22.2	3.3	3.5
Pennsylvania	19	1,007,985	863,271	144,714	+16.8	3.5	3.8
West Virginia	6	59,050	52,595	6,455	+12.3	3.4	3.9
Fourth District		3,848,762	3,225,100	623,662	+19.3	3.4	3.7
United States		46,151,170	37,325,470	8,825,700	+23.6	3.3	3.5
Fourth District as percent of U.S.		8.3%	8.6%	7.1%	———	—	—
Metropolitan Areas*							
Akron	1	122,963	93,994	28,969	+30.8	3.3	3.6
Canton	1	83,604	63,471	20,133	+31.7	3.4	3.7
Cincinnati	4	283,683	244,108	39,575	+16.2	3.2	3.3
Cleveland	2	448,912	364,534	84,378	+23.1	3.3	3.5
Columbus	1	149,178	109,737	39,441	+35.9	3.4	3.5
Dayton	1	120,871	83,963	36,908	+44.0	3.3	3.5
Erie	1	65,291	50,346	14,945	+29.7	3.3	3.6
Pittsburgh	3	569,847	484,295	85,552	+17.7	3.5	3.9
Toledo	1	120,416	99,965	20,451	+20.5	3.3	3.4
Youngstown	3	148,344	119,941	28,403	+23.7	3.5	3.9
Total 10 Metropolitan Areas		2,113,109	1,714,354	398,755	+23.3	3.4	3.6
10 Areas as percent of Fourth District		54.9%	53.2%	63.9%	———	—	—
Balance of Fourth District		1,735,653	1,510,746	224,907	+14.9	3.4	3.7
Balance of District as percent of Fourth District		45.1%	46.8%	36.1%	———	—	—

Source: April 1, 1950 and 1940, Census of Housing

* As defined by F. W. Dodge Corporation

FINANCIAL AND OTHER BUSINESS STATISTICS

Time Deposits at 55 Banks in 12 Fourth District Cities

(Compiled May 4, and released for publication May 5)

City and Number of Banks	Time Deposits Apr. 25, 1951	Average Weekly Change During: Apr. 1951	Mar. 1951	Apr. 1950
Cleveland (4)	$ 868,062,000	+$ 19,000	—$ 931,000	—$260,000
Pittsburgh (9)	486,916,000H	+ 567,000	+ 280,000	+ 440,000
Cincinnati (8)	176,691,000	+ 572,000	— 120,000	+ 225,000
Akron (3)	98,795,000	+ 25,000	— 108,000	+ 96,000
Toledo (4)	106,828,000H	+ 230,000	+ 55,000	+ 32,000
Columbus (3)	86,328,000	+ 98,000	— 112,000	+ 76,000
Youngstown (3)	61,668,000	+ 66,000	— 25,000	+ 63,000
Dayton (3)	44,842,000	+ 201,000	— 61,000	+ 34,000
Canton (5)	41,480,000	+ 81,000	— 104,000	+ 41,000
Erie (3)	40,933,000H	+ 55,000	+ 9,000	+ 130,000
Wheeling (5)	26,566,000	+ 55,000	— 21,000	+ 37,000
Lexington (5)	10,727,000	+ 31,000	+ 15,000	+ 1,000
TOTAL—12 cities	$2,049,836,000	+$2,000,000	—$1,123,000	+$914,000

H—Denotes new all-time high.

Time deposits at reporting banks in twelve Fourth District cities increased at an average weekly rate of $2 million during April. This expansion followed eleven months of almost continuous shrinkage, with the exception of the seasonal December inflow of savings. Every city participated in the rise, which exceeded the April increase in the preceding two years, and contrasted with a decline of $660,000 per week in April 1948.

At the end of the month, the total of time deposits was virtually the same as at the end of 1950, and only 1% less than the comparable year-ago figure.

Cincinnati, which usually registers a gain in time deposits in April, posted an average weekly increase of $572,000, more than double the increment in the same month of the three previous years.

Pittsburgh, Erie and **Toledo,** all of which posted slight increases in time deposits during 1950 contrary to the general trend, again advanced to new all-time highs. **Erie,** however, together with Akron, were the only cities where the rate of increase in these accounts was less than in April last year.

Although **Cleveland** banks, with the largest volume of accounts, reported a gain of only $19,000 per week, this was in direct contrast to the declines which have been characteristic of April in past years.

Adjusted Weekly Index of Department Store Sales*

Fourth District

(Weeks ending on dates shown, 1935-39 average = 100)

1950r		1951		1950r		1951	
Jan.	7.....278	Jan.	6.....425	July	1.....327	July	7.....
	14.....310		13.....412		8.....322		14.....
	21.....320		20.....443		15.....354		21.....
	28.....308		27.....398		22.....388		28.....
					29.....418		
Feb.	4.....293	Feb.	3.....287	Aug.	5.....374	Aug.	4.....
	11.....308		10.....359		12.....344		11.....
	18.....279		17.....354		19.....330		18.....
	25.....255		24.....365		26.....323		25.....
Mar.	4.....258	Mar.	3.....302	Sept.	2.....295	Sept.	1.....
	11.....279		10.....293		9.....324		8.....
	18.....264		17.....266		16.....345		15.....
	25.....263		24.....251		23.....318		22.....
			31.....293		30.....335		29.....
Apr.	1.....285					Oct.	6.....
	8.....279	Apr.	7.....297	Oct.	7.....297		13.....
	15.....262		14.....311		14.....307		20.....
	22.....283		21.....323		21.....287		27.....
	29.....334		28.....358		28.....298		
May	6.....299	May	5.....336	Nov.	4.....280	Nov.	3.....
	13.....296		12.....312		11.....281		10.....
	20.....299		19.....313		18.....288		17.....
	27.....295		26.....312		25.....221		24.....
				Dec.	2.....195	Dec.	1.....
June	3.....295	June	2.....		9.....328		8.....
	10.....314		9.....		16.....334		15.....
	17.....309		16.....		23.....314		22.....
	24.....306		23.....		30.....342		29.....
			30.....				

* Adjusted for seasonal variation and number of trading days. Based on sample of weekly reporting stores which differs slightly from sample reporting monthly.

Bank Debits*—April 1951 in 31 Fourth District Cities

(In thousands of dollars)
(Compiled May 11, and released for publication May 12)

No. of Reporting Banks		Apr. 1951	% Change from Year Ago	3 Months Ended Apr. 1951	% Change from Year Ago
185	ALL 31 CENTERS—	$9,423,866	+38.4%	$27,362,846	+33.6%
	10 LARGEST CENTERS:				
5	Akron, Ohio	356,717H	+49.9%	992,367H	+46.6%
5	Canton, Ohio	141,211	+26.3	422,741	+32.1
15	Cincinnati, Ohio	1,085,781	+30.0	3,298,476	+26.9
10	Cleveland, Ohio	2,556,880H	+53.5	7,108,597	+40.2
7	Columbus, Ohio	611,009	+14.2	1,769,956	+ 8.6
4	Dayton, Ohio	292,627	+31.7	869,334H	+30.6
6	Toledo, Ohio	429,777	+20.5	1,297,905	+27.8
4	Youngstown, Ohio	201,413	+24.4	593,771	+31.3
6	Erie, Penna.	107,689	+24.8	333,036	+31.0
46	Pittsburgh, Penna.	2,883,219	+46.7	8,389,082	+41.7
107	TOTAL	$8,666,323	+40.3%	$25,075,265	+34.8%
	21 OTHER CENTERS:				
9	Covington-Newport, Ky.	$ 41,993	+ 6.5%	$ 129,797	+10.0%
6	Lexington, Ky.	63,707	+ 0.3	202,310	+ 4.9
3	Elyria, Ohio	25,469	+29.6	77,469	+35.3
3	Hamilton, Ohio	48,210	+35.1	141,141	+28.8
2	Lima, Ohio	56,692	+34.5	170,626	+37.5
5	Lorain, Ohio	20,601	+31.0	57,657	+21.8
4	Mansfield, Ohio	54,882	+21.7	166,273	+30.7
2	Middletown, Ohio	44,023	+17.6	138,289	+22.8
3	Portsmouth, Ohio	23,741	+12.8	69,110	+15.5
3	Springfield, Ohio	56,488	+30.6	164,687H	+24.9
4	Steubenville, Ohio	26,717	+18.3	79,493	+21.8
2	Warren, Ohio	50,706	+30.5	151,050	+36.6
3	Zanesville, Ohio	30,551	+ 3.9	89,924	+14.5
3	Butler, Penna.	35,972	+28.7	106,025	+28.2
1	Franklin, Penna.	8,143	+24.6	24,041	+27.6
2	Greensburg, Penna.	23,465	+18.9	73,291	+27.3
4	Kittanning, Penna.	12,699H	+28.4	36,037H	+44.7
3	Meadville, Penna.	15,007	+25.8	44,255	+21.9
4	Oil City, Penna.	18,837	+ 9.3	56,899	+ 9.9
5	Sharon, Penna.	30,002	+12.8	94,945	+21.6
6	Wheeling, W. Va.	69,638	+18.5	214,262	+18.1
78	TOTAL	$ 757,543	+19.8%	$ 2,287,581	+22.5%

* Debits to all deposit accounts except interbank balances.
H Denotes all-time high.

Debits to deposit accounts (except interbank) at banks in 31 Fourth District cities during April fell below the all-time high volume of the previous month, but registered a gain of 38.4% over the year-ago figure, one of the widest margins of increase on record. Percentagewise, the March-April decline was smaller than in any of the three prior years. In part, the relatively high April debits total may be attributable to substantial Treasury withdrawals from swollen Tax and Loan Accounts.

TEN LARGEST CENTERS

Debits aggregated $8,666,323,000 for the month at the large centers for a gain of 40.3% over April 1950. This indicates a still faster rate of expansion of checking account activity at large centers as a group than at the smaller localities.

Cleveland and **Akron,** where debits reached new all-time highs, led the large cities in year-to-year comparisons with gains of 53.5% and 49.9% respectively. They were followed closely by **Pittsburgh** with an increment of 46.7% over April last year. These three cities also registered the largest percentage gains over the comparable period of last year for the past three months combined.

Toledo, Cincinnati and **Columbus** were the only large centers with increments of less than 30% for the three-month period.

TWENTY-ONE SMALLER CENTERS

Debits totalling $757,543,000 at the smaller centers during April exceeded the year-ago figure by only 19.8%, the smallest percentage gain since the outbreak of the Korean war.

The decline from March total was more than seasonal despite an increase in deposits, and was shared by all the small centers except **Kittanning,** which posted a new all-time high debit volume.

Lima continued among the leaders in year-to-year gains, and was similar to four other localities, **Hamilton, Lorain, Springfield** and **Warren,** in registering increments of more than 30%.

Indexes of Department Store Sales and Stocks

	Daily Average for 1935-1939 = 100 Adjusted for Seasonal Variation			Without Seasonal Adjustment		
	April 1951	March 1951	April 1950	April 1951	March 1951	April 1950
SALES:						
Akron (6)	339	278	301	295	278	287
Canton (5)	399	355	378	363	334	359
Cincinnati (8)	325	292r	322	299	292	309
Cleveland (11)	289	269	266	275	263	261
Columbus (5)	379	302	330	338	314	313
Erie (4)	379	332	345	349	319	332
Pittsburgh (8)	291	257	278	274	267	273
Springfield (3)	282	274	286	262	271	278
Toledo (6)	310	287	281	291	284	276
Wheeling (6)	244	230	264	219	239	253
Youngstown (3)	367	338	325	337	345	319
District (98)	323	286	299	297	286	290
STOCKS:						
District	395	396	283	401	392	287

r—Revised

OUTLOOK FOR SULFUR

by CLYDE WILLIAMS, *Director, Battelle Memorial Institute*

Because of unprecedented demand and limitations to the present major source of supply, there is a shortage of sulfur in the United States. Processes are already available, however, that make possible, at a price and from other sources, increased supplies of this basic industrial raw material.

Not usually a part of the end-product, sulfur is, nevertheless, essential to America's industrial production. About 85 to 90% of sulfur marketed in this country is consumed in the form of sulfuric acid and sulfur dioxide. Typical uses for sulfuric acid are as a catalytic agent in petroleum refining, as a pickling or cleansing agent in the iron and steel industry, and as a major raw material in fertilizer manufacture.

For many years, most sulfur has come from large deposits of native sulfur in the Gulf Coast area of Texas and Louisiana. By pumping 340°F. water into sulfur-bearing salt-domes found in the region, it has been possible to melt and bring sulfur to the surface at a cost lower than by any other method. Production by this (Frasch) process jumped from 2 million tons in 1936 to a peak level of almost 5 million tons in 1950. The Gulf Coast now accounts for more than 80% of the country's sulfur supply.

Production from this area probably will remain steady at the current level for a number of years. It is unlikely that there will be an increase in output sufficient to meet the expanding needs of industry. This assumes no large discovery as a result of present explorations such as the drilling in Mexico and on the Continental Shelf off the Gulf Coast of the U. S.

Other principal sources for sulphur include copper, zinc and lead smelters; natural and industrial gases; and iron pyrite. It has been estimated that about 3 million long tons of sulfur could be economically recovered from these sources annually by present processes.

Actually, less than one-third of this potentially recoverable sulfur was produced in 1950. As in previous years, sulfur mined by the less expensive Frasch-process has made production from other sources, for the most part, uneconomical. Constantly increasing demand, plus limitations of the present major source of supply, however, are likely to change this picture.

It is estimated that at least one-half of the sulfur recoverable from other sources may come from pyrite. A new process, developed by Battelle Institute for Noranda Mines, Ltd., Canada, permits recovery of a high percentage of elemental sulfur from pyrite. Since one ton of elemental sulfur is equivalent to two tons of sulfur dioxide or to about three tons of sulfuric acid, to ship sulfur means lower transportation costs. Conversion of elemental sulfur to sulfur dioxide or sulfuric acid can then be done at the consuming location. Thus, new methods may put pyrite-derived sulfur in a competitive position with Frasch-process-mined sulfur, where the producing location is closer than the Gulf Coast to consuming centers. The role of sulfur from pyrite will become even more important if no major discovery of sulfur deposits amenable to the Frasch process occurs within the next decade.

Sulfur derived from lead, copper, and zinc smelters and from natural and industrial gases, while not offering the volume potential of pyrite, will continue to be an important source of supply. Recovery from these by-product sources becomes profitable where large-scale operations and nearby markets result in costs below the delivery price of sulfur from more distant locations. Using existing processes, it is estimated that production of sulfur from lead, copper, and zinc smelters might be increased from 200,000 tons to 1,000,000 tons and that from natural and industrial gases from 150,000 tons to 300,000 tons, if the price of sulfur justified this recovery.

The current shortage of low-priced native sulfur and its consequently rising price is tending to bring previously unexploited sources into operation. On the other hand, some consumers now may find that the cost of new sulfur is greater than the cost of recovering that presently wasted. Recent interest in pickle-liquor recovery in the steel industry, for example, indicates that practices wasteful of sulfur are being re-evaluated and that conservation steps are now being taken.

Whatever direction exact adjustments may take, ample supplies of sulfur are in sight. Technological processes that are already available will help to hold the price of sulfur from skyrocketing, not only by bringing new sources of supply into the picture, but also by decreasing the demand through recovery of sulfur now wasted.

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.