ederal Reserve Bank of Atlanta • 1972

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The 1971 Forecasts Revisited and a Look at 1972

by Frederick R. Strobel and William D. Toal

"If all the economists in the world were laid end to end, they would never reach a conclusion." So goes an old saying. In March of 1971, the **Monthly Review**¹ implicitly put this statement to the test by explaining the workings and presenting the forecasts of five well-known econometric models.² We noted at the time that despite the varying theoretical approaches of the models (the St. Louis and RCA models take the "monetarist" approach, the others are basically "Keynesian"), all five tended to agree in their overall forecast for 1971.

While this fact of agreement belies the opening quote, consensus is not the proof of the pudding, i.e., the mob can be wrong. What counts is whether or not the forecasts turn out to be accurate. And, from the actual data shown in the table, the five models, in addition to their general agreement, achieved high marks for accuracy in many of their predictions for 1971.

A year ago, our summary description of these models' 1971 forecasts was as follows:

The year 1971 will be one of gradual economic improvement. Real economic growth will resume a positive rate, with the economy expanding at 2.5 percent to 3.0 percent. Housing (residential investment in the table) should serve as a major stimulus to the economy. Price increases will be in the neighborhood of 4.0 percent, slowing from 1970's increase of 5.3 percent. However, the labor situation is not expected to improve significantly, with the unemployment rate expected to remain close to 6.0 percent.

 ³F. R. Strobel and W. D. Toal, "Econometric Models: What They Are and What They Say for 1971."
^aThe five models were: University of Michigan, Data Resources, Wharton, St. Louis Federal Reserve Bank, and RCA.

Monthly Review, Vol. LVII, No. 3. Free subscription and additional copies available upon request to the Research Department, Federal Reserve Bank of Atlanta, Atlanta, Georgia 30303.

Though missing in some detail, the models' batting average for 1971 AS A WHOLE was good.

(Figures in billions of current dollars unless otherwise indicated)

age ¹ Actual
1046.8
4.6
4.0
2.7
662.1
151.6
108.7
2.2
40.6
0.0
5.9

¹Total investment, certain components of investment, and net exports were forecasted by neither the St. Louis nor RCA models. Also, the St. Louis model did not forecast consumption. Consequently, the model averages for these components of total spending are based on the remaining models.

²Computed as the percent change in the GNP implicit deflator. ³Exports minus imports.

Dates of Forecast Release: November and December, 1970. The five models were: University of Michigan, Data Resources, Wharton, St. Louis Federal Reserve Bank, and RCA.

A year later a summary description of the economy's actual performance in 1971 is as follows:

The year 1971 was one of gradual economic improvement. Real economic growth resumed a positive rate, with the economy expanding at 2.7 percent. Housing, a major stimulus to the economy, advanced by 34 percent to record levels. The GNP implicit price deflator advanced by 4.6 percent and the Consumer Price Index climbed by 4.3 percent. The unemployment rate averaged 5.9 percent for the year, down only slightly from December 1970's rate of 6.1 percent.

Clearly, the above paragraph seems in general agreement with the average forecasts of the five models summarized in the previous paragraph. A closer look indicates, however, that the models did miss on some of the components of Gross National Product (GNP). This is largely because events happened, or economic relationships changed, that could not be foreseen at the time the forecasts were made.

Indeed, 1971 was an unusual year for the economy, containing many unforeseen developments on both the domestic and the international scenes. And, when this happens, econometric models are more likely to miss their mark. As we stressed in our article last year, a key to econometrics is predictability. With this in mind, let us see which aspects of spending, prices, and unemployment in 1971 differed from the predictions made in late 1970.

A Closer Look

Actually, the forecasts of two major types of expenditures on goods and services---consumption and total investment-registered only slightly lower scores for accuracy than the overall GNP forecast. (Government expenditures, while considered by the models, were not included in our discussion of the forecasts, since they were determined outside each of the five econometric models.) More specifically, consumption expenditures provided a lift to the economy that was, in the main, forecasted by the models. The models, however, undershot the amount of total investment expenditures by a slightly wider margin than consumption. Business fixed investment was only slightly stronger than expected; residential investment was considerably more robust. Thus, the models fell below target in some sectors that were sources of strength in the economy for 1971, particularly in residential building.

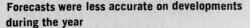
Inventory investment proved to be a disappointment in adding fuel to the 1971 recovery. Although this component of investment expenditures increased, it did not show the strength that the models anticipated. Lack of optimism on the part of businessmen, apparently, held down the actual amount of inventory investment to less than 50 percent of what the five models, on average, had forecast.

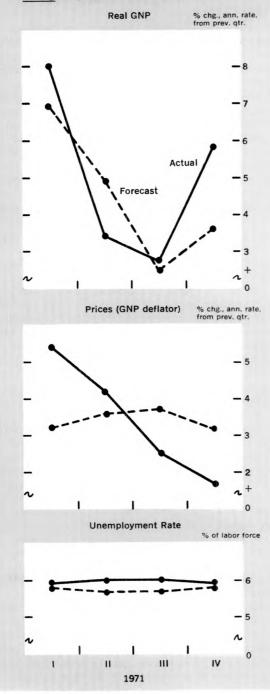
Net exports also fell far short of the optimism contained in the models' average forecast. Whereas the models projected a gradual improvement in the net export situation during the year, pronounced deterioration was the actual result. Basic to this was the uncertainty over international monetary and trade developments and a prolonged dock strike, which aggravated an already troubled trade balance.

At the same time, even though the models accurately predicted the path of the economy in 1971 as a whole, they were less accurate in their forecasts of the quarterly pattern during the year. As the chart indicates, the models erred, particularly in forecasting the rate of inflation for individual quarters. The expected slowing in the rate of price increase forecasted by the models in the first and second guarters of 1971 did not take place. Moreover, real economic growth, which had turned out greater than expected in the first quarter, slowed to a 3.4-percent annual rate in the second quarter, short of what had been forecast by the five models. Then, too, the projected unemployment rate in the second quarter was slightly below the actual rate.

Partially because the economy was not improving as expected, the Administration drastically changed

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its policy in mid-August. Of course, the five models did not predict the New Economic Program. Yet, the five-model annual forecast of prices came fairly close to the actual annual rate of price increase. Why? With the enactment of the 90-day freeze and later price controls, prices in the final two quarters of the year increased much less than the five models predicted at year-end 1970. As a result of undershooting in the first two quarters and overshooting in the final two quarters, the models were reasonably accurate in the annual price forecast, predicting only a slightly lower rate of price increase than actually occurred.

While the price freeze and post-freeze developments had a sharp dampening influence on price increases, the New Economic Program's effects on real economic growth have been less certain. It should be noted, however, that real economic growth in the fourth quarter perked up more rapidly than had been forecasted, and the unemployment rate receded slightly—rather than rising slightly toward the end of the year as predicted.

The Outlook for 1972

Last year's agreement among the five models (and along with many other forecasts) showed a strong divergence from the forecast released by the Council of Economic Advisors. The Council, while recognizing that ". . . a considerable body of opinion . . . expects the Gross National Product to be in the range between \$1,045 billion and \$1,050 billion, . . . " set as a "target" the figure of \$1,065 billion for the 1971 GNP.³

The Council's Outlook for 1972. This year, the Council seems to be in closer agreement with most forecasts, be they econometric or judgmental. The Council puts the prospective rise in the 1972 GNP at "about \$100 billion," the increase in real output at "about 6 percent," and an increase in prices of "around 3 1/4 percent."⁴

According to the Council, it also seems likely that, except for investment in new houses, every major category of expenditures will rise more or decline less than in 1971. Better performances and increases are likely in inventories, exports relative to imports, Federal Government purchases of goods and services, and consumer expenditures. The recent rise in total sales during a period of generally unchanged inventories was viewed as a propelling factor for future inventory increases. The growth in output, the Job Development Credit (the 7-percent investment tax credit), and recent depreciation liberalization underlie the projected speedup of business

³Economic Report of the President, 1971, p. 84. Fiscal 1972 Budget projections were also based on a \$1,065 billion GNP for the calendar year, 1971.

⁴Economic Report of the President, 1972, p. 25.

investment in plant and equipment. As viewed by the Council, consumer expenditures will be bolstered by rising earned incomes, tax reductions, larger Social Security benefits, and greater confidence in the future.

The recent realignment of world currencies is expected to strengthen net exports. The Federal budget should further stimulate the economy. A \$25.5-billion deficit is projected for fiscal year 1973. The following table, upon which Federal budget receipts are estimated, provides further insight into the Council's prospects for 1972.

Economic Assum	ptions in th	e Federal	Budget						
(Calendar Years in Billions)									
Description	1970 Actual	1971 Estimate	1972 Estimate						
Gross National Product	\$974.1	\$1,047	\$1,145						
Personal income	803.6	857	924						
Corporate profits before taxes	75.4	8 5	99						
Source: Office of Ma	nagement and	d The Budge	t						

Prices and unemployment are also anticipated to move in the desired directions. The Council expects prices to be held in check by continued operation of the economy at less-thancapacity rates and also by the effects of the price-wage-rent control system. Unemployment is expected to fall and be in the neighborhood of 5 percent by year-end.

Will these predictions turn out to be accurate? The Council recognizes that these 1972 estimates, like all economic forecasts, are subject to a considerable margin of possible error. It is conceivable that a number of events now unforeseen could change the economic picture for better or worse. For example, the Council assumes in its forecasts that personal saving will continue at a higher than normal rate. Yet, it is possible that consumers will lower their saving rate from its historically high level as the unemployment rate declines. Some economists have attributed much of last year's consumer conservatism to concern over the high unemployment rate. Thus, a lower unemployment rate might be self-reinforcing by simultaneously boosting consumer confidence and spending, thus giving an added lift to the economy.

On the other hand, while the most recent Commerce-SEC survey indicates that businessmen intend to increase their plant and equipment spending by 10.5 percent in 1972, it must be remembered that the level of capacity utilization in manufacturing is low. Should the economy fail to expand at the fourth quarter 1971 rate (close to a

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Digitized for FRASER http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis 6-percent annual real growth rate), will businessmen modify these investment plans? The answer to these and other questions will determine whether the rise in the economy will be more or less than predicted.

In short, unforeseen economic, political, or social changes could occur in 1972 that would alter the accuracy of today's economic forecasts, be they government, private, econometric, or judgmental. However, the five models that we looked at last year were, in the main, on target. Most likely, economic forecasters, in general, would be happy if they could consistently match this 1971 forecasting record.■

Reprints of the March 1971 article "Econometric Models: What They Are and What They Say for 1971" are still available. For those unfamiliar with the concept of econometric model building, this article explains how models are constructed and how they are used.

Bank Announcements

FEBRUARY 1, 1972

NORTHSIDE COMMUNITY BANK St. Petersburg, Florida

Opened for business as a nonmember. Officers: Richard C. Johnson, chairman; George Ruppel, president; Robert F. Guthrie, vice president and cashier. Capital, \$400,000; surplus and other capital funds, \$350,000.

FEBRUARY 25, 1972

UNITED NATIONAL BANK OF WESTLAND Hialeah, Florida

Opened for business. Officers: George E. Stock, chairman; Frank Smathers, Jr., vice chairman; Peter J. Hardiman, president; A. R. Roy, Jr., senior vice president; June Daryman, Edward C. Duncan, Jr., William D. Duncan, Ralph J. Fairbairn, Edgar H. Nugent, Jr., Robert L. Schumann, vice presidents; Hans B. Berggren, James D. Grady, Arthur Lewis, assistant vice presidents; Jose E. Alonso, cashier; Davy L. Garrett, Jr., assistant cashier; and Kenneth F. Everly, auditor. Capital, \$600,000; surplus and other capital funds, \$400,000.

Coal: Roaring Again!

by Brian Dittenhafer

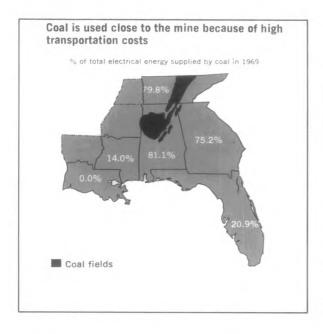
"The reports of my death are greatly exaggerated." Thus did Mark Twain lay to rest the rumors of his reported demise in Europe. Reports of the death of the coal industry in the United States are equally false. After a 20-year hiatus, during which it lost major markets in transportation and home heating, coal production has rebounded strongly in response to increased demands for coal to fuel electric generators. Coal is the largest single source of energy used in generating electricity, and the use of electricity has doubled during the past ten years.

There was much talk in the past of the importance nuclear power would assume in providing for electricity production. Although new and exciting, nuclear power for the generation of electricity has not lived up to its expectations. Problems of ecology, thermal pollution, and rapidly increasing costs have prevented the electricity industry from installing the amount of nuclear capacity it had anticipated. The U. S. Bureau of Mines estimates that electricity generation will increase by 400 to 500 percent by the year 2000, with the largest source of energy continuing to be coal.

Seen Any Coal Lately?

Coal is used to produce half of all the electricity we use in this country, so even if you have not seen any coal lately, it provides energy that is important to your everyday life. A glance at the map shows that where you live makes a great deal of difference in determining how much coal you "use" when you consume electricity. In the Southeast¹, for example, the proportion of electrical energy produced by coal varies from zero in Louisiana to 81 percent in Alabama. Transportation costs for coal are high relative to its value at the mine; therefore, the cost of using coal increases rapidly as distance from the mine increases. Thus, coal provides a larger portion of the electricity for states containing coal fields and a lesser portion for those states that do not. Even if you live in an area where coal is not used to generate electricity, coal is important to you as a raw material and fuel to make the many manufactured products we all tend to take for granted. These products have not always been at our disposal, and coal has been instrumental in making them a part of our lives.

¹The terms **Southeast** and **Sixth District** are used interchangeably in this article and refer to the states of Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee.



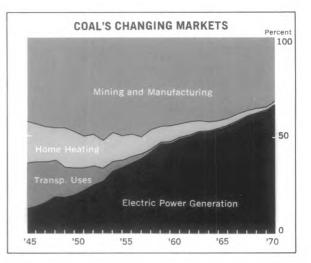
Since the early days of the industrial revolution, when steam power began to replace muscle power, industrial growth has depended upon an abundant coal supply. Nowhere was this truer than in the United States. As industry developed and railroads spread throughout the country, the need for coal to power industry and provide fuel for transportation became enormous. Added to these demands was the desire for a cheap, efficient source of heat for homes. To meet these requirements, the production of coal in the United States expanded from 100 million tons in 1880 to 573 million tons in 1926. The Depression caused output to drop to a low of 310 million tons in 1932. Production continued at this level until the demands of World War II led to a major increase in output. By 1947, the production of coal reached a record high of 630 million tons. From this peak, production trended downward, hitting its most recent low in 1961-when only 403 million tons of bituminous coal were mined. Between 1961 and 1970, coal production increased by nearly 50 percent, to a level only slightly below its all-time high. The reasons for this steep decline and sudden resurgence can be found in the changing markets for coal.

Changing Markets

In 1945, the two largest markets for coal were sales to the transportation industry—where coalburning locomotives were hauling most of the nation's freight—and retail sales—where coal was heating most of the nation's homes. Together, these markets accounted for 45 percent of the coal sold in this country. Yet, by 1970, these same

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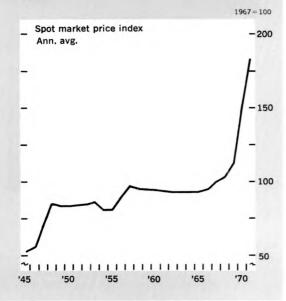
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markets consumed only 2 percent of a slightly smaller volume of domestic production. At present, the electric utility industry, which guadrupled its purchases of coal between 1945 and 1970, is the largest market for coal. But the change in the markets for coal was not a smooth one. Between 1945 and 1961, total consumption of coal in transportation and home heating declined by 219 million tons. Electric utility usage of coal increased by only 108 million tons, however, leaving a net decline in demand during the 16-year period of 111 million tons, or 17.6 percent. Since 1961, demand from electric utilities has increased enough to more than offset other losses. In fact, this sector increased so strongly it outran all the estimates and forecasts on coal consumption, resulting in a critical shortage of coal in 1970.

The coal industry has a history of over-capacity, and production has always been able to meet the demands of the economy, except when interrupted by strikes or some other unforeseen event. During the 1960's, coal prices were low and, although the growth market was the sale of coal to electric utilities, that market was expected to be taken over by nuclear power. Coal did not seem to have much of a future, and certainly did not seem to be the industry in which to invest large amounts of capital. For various reasons, nuclear power plants were not completed on schedule, and the power companies found themselves unable to supply the increasing demands for electricity except through the use of coal-powered generators. This demand quickly absorbed the excess capacity of the coal industry, but the needs of the utilities still could not be met. The result was a coal shortage in 1970, which caused coal users to dig deeply into their reserves of coal, drawing them down to uncomfortably low levels. Since then, the market price of coal has soared; production has expanded; and stocks have returned to more normal levels.

Soaring prices reflect increases in demand and costs



The second-largest market for coal is the coke industry, accounting for 17 percent of total consumption in 1970. Coke is a product of coal produced by heating certain grades of coal in sealed ovens. In the sealed oven, gases are given off that can later be used to make other products. What remains is a dull, gray, porous mass called coke, consisting largely of fixed carbon—which is vital to the production of steel from iron ore. Not all coal can be used for coking, so coal that can be coked, called metallurgical coal, has a higher value per ton than other types.

The volume of coal used in this market depends upon the amount of steel produced, and domestic steel production has not been strong in recent years. In addition, increased efficiency in both the coke industry and the steel industry has caused a steady decline in the amount of coal needed to produce a ton of steel. These effects combine to forestall significant expansion of this market in the United States. However, exports of metallurgical coal have become increasingly important, since foreign steel production has expanded.

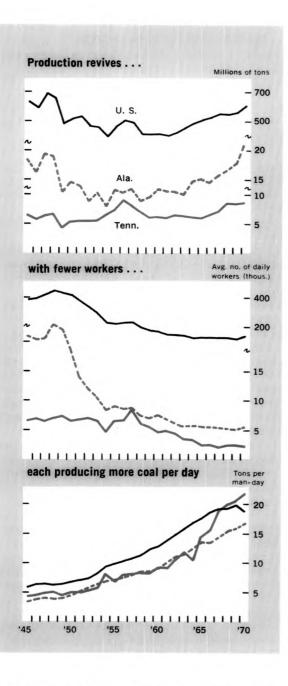
In addition to providing energy, coal is vital to the process of producing steel from iron ore, and, therefore, is vital to the Sixth District's primary metals industry. Indeed, coal is so important to the steel industry that the District's largest mine is owned by a steel corporation. It produces nearly 10 percent of the coal mined in the Southeast. The existence of a primary metals industry in Alabama is dependent upon the coincident occurrence of metallurgical coal and iron ore. Therefore, besides the 7,000 workers employed directly in the coal industry in the Sixth District, coal makes a contribution to the employment of 45,000 other District workers who hold jobs in primary metals.

Coal is mined in only two Sixth District states: Alabama and Tennessee. Alabama produced 20.5 million tons of coal valued at \$166 million in 1970, whereas Tennessee produced 8.2 million tons worth \$40.4 million. These two states, which rank eighth and ninth in national production, accounted for more than 4 percent of the coal mined in the United States in 1970. Much of the coal mined in Alabama is of the special quality used in making coke, and it has a high value per ton. The average value of coal at the mine in the United States in 1970 was \$6.26 per ton, but in Alabama the value was \$8.09. Most of Tennessee's coal is burned to generate electricity and had a value of only \$4.90 per ton in the same year.

The local impact of the industry is, of course, much greater than its impact on the entire District or even on a single state. In Alabama, two-thirds of the coal is mined in Walker and Jefferson Counties, and about the same proportion of the 5,000 people employed in coal mining in the state are concentrated in these two counties. Much the same situation prevails in Tennessee. In that state, over 50 percent of the coal is mined in Anderson, Campbell, and Claiborne Counties, and slightly less than half of Tennessee's 2,000 coal industry workers are concentrated in that three-county area. Coal mining is a relatively highly paid occupation and, therefore, contributes more income to an area than is indicated by employment figures. For example, in August 1971, just before the wage freeze, average hourly earnings in the coal industry were \$4.76, while those in all manufacturing were \$3.56 per hour.

Changing Production

Despite the high pay, the image of coal as a dying industry comes complete with pictures of poor mining families and breadwinners unemployed for long periods of time. Mining employment declines have indeed been sharp, but since 1967 employment has been relatively stable. Although production increased substantially, fewer men are employed today than in 1961. A glance at the next chart shows the tremendous effect of increased productivity that has taken place during the past ten years. The reasons for the growth in productivity are not hard to find, since new machines have been developed for the industry, giving each miner more and better equipment with which to work. Perhaps the increased use of the strip mining method-an extremely low cost way to mine coalhas had an even more powerful effect on the growth in productivity.



Coal is mined by two principal methods: underground mining and strip mining. Underground mining essentially involves digging a tunnel or sinking a shaft into the ground and ripping the coal from the earth. This is the method most of us picture when we think of coal mining operations, and it is the method that accounted for just over half of total U. S. coal output in 1970. Mining coal in this manner is dangerous, but the new Mine Health and Safety Act of 1969 was designed to put strict regulation on underground mines, with the aim of improving the safety record of the

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Digitized for FRASER http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis industry. There have been many improvements in the machines used in underground mining, but it is still the highest cost method of mining coal. According to mine operators, the new safety act is making underground mining even more expensive and causing the closing of many small mines in which new equipment cannot be economically installed.

About 40 percent of the coal produced in the U. S. is strip mined, and the proportion of coal mined by this method is steadily increasing. Within the Sixth District, more than half the coal is mined by this method, which involves removing or stripping the earth and rock that lie over the coal, exposing the coal seam. This is accomplished by using the largest machines ever to move on land, "walking" draglines and power shovels. After the seam is exposed and the coal blasted loose, it is loaded onto trucks or rail cars for transportation and further processing. This method of mining has several advantages. First, it is the cheapest method of mining coal because more tons per man-day can be mined than in underground mining. Second, coal seams which are too thin to be mined by the underground method can be successfully strip mined, thereby increasing the amount of recoverable reserves of coal. The obvious disadvantage is the destruction of the countryside that occurs in the process. Industry and government are now working to ensure the reclamation of mined areas and to minimize the damage to nature.

Changing Structure

Historically, coal has been an industry of many small operators, each having the ability to expand his operations without much notice or fanfare. Nationally, and in the Sixth District, this pattern is changing. Increased requirements for very expensive capital equipment and the requirements of the new Mine Safety Act have combined to accelerate a trend toward consolidation in the industry. With the economies offered by largescale operations, further consolidation and concentration is more, rather than less, likely. In addition to concentration, the capital needs of the industry have caused the acquisition of several large producers by noncoal interests. For example, between 1965 and 1969, companies with oil as their primary product acquired ownership of more than 17 percent of the productive capacity of the coal industry.

One reason why oil companies are interested in coal production is because of the possibility that petroleum products, such as gasoline, fuel oil, and pipeline natural gas, will one day be produced from coal. Research into this type of conversion has been going on for at least 20 years without noticeable commercial success. With shortages predicted in natural gas and petroleum supplies, however, some coal operators see conversion of coal to petroleum products opening a huge future market for coal, with that future not many years away.

Marketing Arrangements

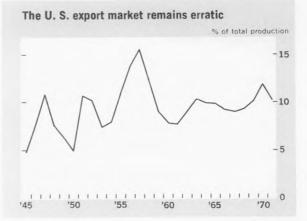
There are several methods of marketing coal and the importance of each is changing as the industry changes. The mine operator may sell his coal directly in the open or "spot" market or, more likely, to a broker. The broker typically buys coal from many small mines in order to fulfill a larger contract or contracts. This method of marketing is used primarily by small operators and is gradually dying out as the number of small operators declines. Coal is also sold under long-term contract, with a provision for the coal to be sold on a cost-plus-profit basis. This type of contract is usually entered into by a large electric company or steel company that has known and anticipated needs for large amounts of coal. The arrangement provides some security of operation for both mine operator and coal user, since a known quantity of coal will be delivered and sold. Thirdly, coal is sold to a parent company by what is known as a captive mine. The coal from such a mine is not sold on the market at all but moves from the mine to its end-use without change of ownership. This method of "marketing" coal is used primarily by utility and steel companies that have large anticipated needs for coal and can therefore justify the expense of running their own mine.

Financing

Capital equipment costs are extremely high, with the capital needed to get into even the very smallest strip mining operation ranging upward from \$250,000. For example, the large "walking" dragline, only a part of the equipment needed to operate a large strip mine, characteristically costs several million dollars. District banks provide working capital for mine operators, much as they would for any other business, and they may participate in and help to arrange loans with other institutions to finance capital equipment. However, most of the financing of equipment is usually made through equipment dealers themselves, tapping national rather than local capital markets.

Coal Exports

The United States is the largest coal-exporting nation in the world. It will probably remain so in the foreseeable future, since more than twofifths of the world's known reserves are located in this country. In 1970, the export market absorbed 70 million tons of coal, about 12 percent of U. S.



production. Exports, however, have proved to be very volatile. In the postwar era, their volume has varied, largely according to the vagaries of international oil supply. In the late Sixties, a more constant demand for U. S. coal was recognized when Western Europe and Japan began buying metallurgical quality coal in large quantities. About two-thirds of the coal exported from the United States is used by the importing countries to produce coke. In the future, therefore, it is likely that the trend in exports of coal will depend more upon production of and demand for steel than upon international oil supplies.

Canada lost her historical position as the largest foreign market for U. S. coal in 1969, when Japan imported more than 21 million tons of coal from the United States, 5 million tons more than Canada. Exports in 1970 reached their highest level since the Suez Crisis in 1956-57, but fell off in 1971, as recessionary business conditions in Europe and Japan lessened demands for metallurgical coal. U. S. exports of coal to countries outside North America were 25 percent below 1970 levels, while shipments to Canada and Mexico were only slightly below their year-ago level.

In the Sixth District, exports have expanded even more rapidly than in the nation. In 1970, about 687 thousand tons of coal were shipped through the Port of Mobile, using the Alabama State Dock facilities. In the twelve-month period ending October 31, 1971, the Alabama State Docks handled more than one million tons of coal through their facilities, an increase of 63 percent in only one year. It is estimated that 95 percent of this coal came to the Port of Mobile by barge from the Birmingham area. In the Port itself, there are handling facilities to transfer the coal directly from barge to the overseas vessel.

Plans are under way to export 1.25 million tons of Alabama coal per year through the Port of Pascagoula, Mississippi. This facility is scheduled for opening in 1974. Plans also call for the Port of Mobile to spend \$15 million on coal handling facilities to acquire the capability of shipping 4,000 tons per hour by 1976. This would allow the Port of Mobile to handle 5 million tons of coal in 1976.

These plans for expansion in port facilities are only necessary because of expected expansion of foreign demand. At least one Alabama company has a long-term contract to sell large amounts of coal overseas, and similar contracts have been talked about with other companies. The market for high-value, metallurgical coal—which makes up most of Alabama's export production—is not as strong as in 1971 because of cutbacks in steel production in coal-importing countries. These cutbacks will probably be temporary, however, and the long-term outlook is for continued expansion in exports.

Coal's Future

The standard of living to which we have all grown accustomed in the United States demands tremendous inputs of energy: energy to power our cars, to heat our homes, to wash our dishes, and to do the multitude of other chores that we have come to expect machines to perform for us. The United States doubled its consumption of energy between 1960 and 1970 and reliable authorities predict that we will use half again as much in 1980. In the face of this tremendous demand for energy, how is the United States fixed for energy reserves?

To answer that question, we need to look at our present energy sources. In 1969, fuels provided 95 percent of all the energy used in this country, including energy used to power automobiles. Coal provided 20 percent; oil, 43 percent; and natural gas, 32 percent of the total amount of energy used. Electricity generated by water power provided another 4 percent of the total, and nuclear power accounted for the rest—about 0.2 percent in 1969.

This pattern of energy usage is likely to change in the future. Athough providing only one-fifth of the total energy used, coal makes up four-fifths of the total energy reserves of the United States. If all of our anticipated energy requirements between 1970 and the year 2000 were supplied by oil, it would require 590 billion barrels of crude oil. That's about 17 percent more oil than we ever have reason to expect to find in the United States. If all that energy were supplied by coal, it would require the equivalent of 170 billion tons of bituminous coal, which is slightly less than 11 percent of the coal reserves already explored and mapped. No fuel except coal can currently claim to have enough known reserves to supply our anticipated energy needs until the year 2000. This includes uranium, which at present levels of technology has less than one percent of the proved recoverable energy resources in the United States.

If we continue to use coal at 1970 levels of usage, we have known recoverable reserves of coal for the next 1,000 years.

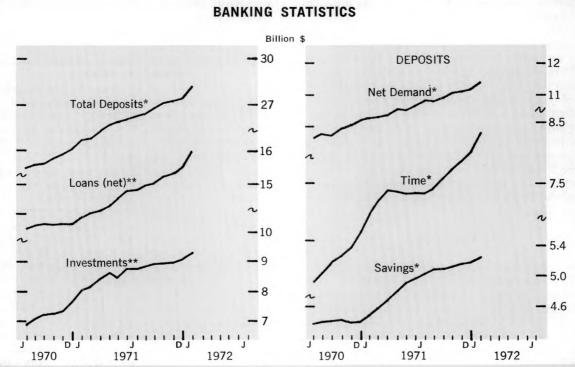
In mid-1970, the U. S. Bureau of Mines estimated that by the year 2000 the United States will annually consume at least twice, and perhaps four times, as much coal as was used in 1970. Exactly how much we will use will depend primarily upon how much coal is converted into petroleum and natural gas. The median estimate is that we will need 1,975 million tons of coal in 2000, or three times as much as we mined in 1970.

It would seem, then, that the future of coal is assured-but is it? As was mentioned above, a large part of the coal produced in the United States is mined by strip methods. Strip mining leaves ugly scars on the countryside if the mines are not properly reclaimed. If society wishes to have its wilderness areas restored to something approaching their natural beauty, it will be required to pay for this in the form of higher prices for coal. Many states now require strip mine operators to post bond, certifying that they will reclaim the land after it has been mined. Close to home, the Tennessee Valley Authority, which buys more than half the coal produced in Tennessee, is making changes in its coal purchase procedures in an attempt to require that strip miners reclaim the land they have mined.

A second major problem that must be solved is that of sulphur dioxide pollution. It is now possible to remove most of the soot and fly ash from the emissions of coal burning plants, but the removal of sulphur dioxide has proved to be difficult. One method of sulphur abatement is to burn only fuel low in sulphur content, thus reducing the amount of sulphur available to react with oxygen and, thus, form sulphur dioxide. Some cities now require that fuels burned in their jurisdiction be low in sulphur. This requirement has resulted in some low sulphur Alabama coal being transported to new markets in the Midwest. But there is not enough low sulphur coal to meet our energy needs, so the solution lies in finding a method of removing the sulphur after the coal is burned. According to utility industry sources, there is still some question about the effectiveness of the sulphur abatement equipment offered on the commercial market.

Coal's future is one of high potential, but it also holds some unsolved problems. Coal has huge amounts of energy reserves that will be called upon to supply the United States with energy in the future. However, it must find ways to erase its image as a despoiler of the land and, in cooperation with government and other industries, must find ways to solve the air pollution problem. We can have both a high energy-using country and a clean environment; the problem lies in finding the technology. ■

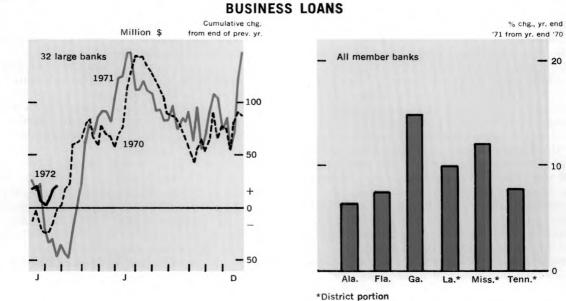
FEDERAL RESERVE BANK OF ATLANTA



LATEST MONTH PLOTTED: JANUARY

Note: All figures are seasonally adjusted and cover all Sixth District member banks. *Daily average figures **Figures are for the last Wednesday of each month.

SIXTH DISTRICT JKING NOTES



48 Digitized for FRASER http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis 0

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The long-awaited strengthening of business loan demand at large commercial banks in the Sixth Federal Reserve District appears to have begun. Sizable gains in business loans were recorded in December, even after allowing for the strong increase that is normal at that time of the year. Growth continued throughout January and the first half of February of this year, periods that are normally associated with seasonal declines in business loans. This strength is not yet overwhelming, however, and may be partly attributable to special factors.

The rejuvenated growth in business lending did not take place at all large commercial banks, nor did all categories of business loans strengthen. Figures from 23 large banks that report their loans by borrower's type of business showed that increased borrowing by major durable goods manufacturers and by firms involved in textile, apparel, or leather production accounted for the majority of the dollar business lending growth at these banks.

This turnaround is a welcomed switch from the weakness in business loans during 1970 and 1971. Even though business lending at 32 large banks in 1971 was up 5 percent over the 1970 level—a year with virtually no growth—the gain was only half as great as the advances made in 1968 or 1969.

Business lending in 1971, a year of economic recovery, did not follow the usual post-recession growth pattern. In the three recovery periods following the economic downturns of 1957-58, 1960-61, and 1966-67, business lending was decidedly stronger during the second six months of recovery than during the first six months. Just the reverse happened during the 1971 recovery period. Growth in the first half (up 3 percent) was stronger than that of the second half (up 2 percent).

While business borrowing activity (as measured against gains during previous nonrecessionary years) was generally weak in 1971, the greatest impact of the slump was on lending to nondurable goods manufacturing firms and construction firms. At the 23 large banks, loans to nondurable goods manufacturing firms declined \$42 million, contrasting sharply with the \$20-million increase in 1970. Loans to construction firms declined \$14 million further in 1971, after falling \$28 million in 1970.

The mildness of the economic recovery was an underlying factor behind last year's slow business loan demand. Business did not receive the same

BUSINESS LOANS									
	Change	From Pre	vious Year						
23 Large Banks	1971	(Million 1970	\$) 1969						
Durable goods mfg.	- 4	+ 6	+31						
Nondurable goods mfg.	-42	+20	+58						
Mining	+ 1	- 8	+14						
Wholesale and Retail Trade	-10	+ 9	+29						
Transp., Comm., & P. U.	+17	-19	+43						
Construction	-14	-28	+19						
Services	+23	+ 6	+86						

strong stimulation to expand production and rebuild or expand inventories that it has received during other recovery periods. Moreover, many corporations experiencing increased sales were able to satisfy their needs for working capital through internally generated funds. Thus, only light demands for working capital developed.

Sluggish spending for new and expanded manufacturing facilities in the District suppressed still further the rise in the demand for funds from banks. Announcements of such investments in 1971 were well below 1970 levels.

Continued heavy use by corporations of longterm nonbank financing—sales of stocks and bonds—also contributed to the weakness in business loan demand. Some corporations used portions of funds received from the sale of long-term debt to repay their short-term bank business loans.

Faced with weak loan demand and plentiful funds, bankers in this District, as in other regions, reduced their prime rate from a high of 8½ percent in 1970 to less than 5 percent by early 1972. At the same time, nonprime customers also received reductions in their loan charges.

This recent renewal of business loan growth should continue and strengthen if businessmen decide to rebuild inventories that have been reduced by the increased growth in sales and orders during the last couple of months. An improved profit position and the tax credit on new investments are expected to help speed up plant and equipment spending, and, if that materializes, should also help increase demands for bank credit. But if businessmen continue to follow conservative inventory policies and rely heavily on nonbank and internal financing, demands for bank credit are unlikely to rise spectacularly in the near future.

JOSEPH E. ROSSMAN, JR.

FEDERAL RESERVE BANK OF ATLANTA

Sixth District Statistics

Seasonally Adjusted

(All data are indexes, unless indicated otherwise.)

			One Month	Two Months	One Y ea r
	Latest	t Month			Ago
Manufacturing Payrolls	Jan. Dec.	142 126	140 123	137 116	132 106
Crops	Dec.	142	141	105	112
Instalment Credit at Banks* (Mil. \$)					
New Loans	Dec.	414 342	442 364	411 347	341 338
Nonfarm Employment	Jan.	114	112	113	112
Manufacturing	Jan.	107	106	106	106
Food	Jan,	106	103	102	105
Apparel	lan	104	105	104	103
Paper Brinting and Bublishing	Jan. Jan	108	107	108	110
Chemicals	Jan.	106	106	106	106
Lbr., Wood Prods., Furn. & Fix.	Jan. Jan.	104	101	104	105
Stone, Clay, and Glass	Jan.			106	107
Fabricated Metals	Jan.	111	112	113	112
Transportation Equipment	lan				160 104
Nonmanufacturing	Jan.	116	115	115	114
Transportation	Jan.	115	114	113	113
Trade	Jan. Jan.	116 120	112 120		
Services		116	118	118	116
		104	122	122	119
Farm Employment	Jan.	94	92	86	93
(Percent of Wark Force)	Jan.	4.3	4.4	4.6	4.6
(Percent of Cov. Emp.)	Jan.	2.5	2.6	2.6	3.0
Avg. Weekly Hrs. in Mfg. (Hrs.)	Jan.				
Residential	Jan.	209	236	229	127
Electric Power Production**	Nov.	169	168	168	164
Month Month Age Age Age SIXTH DISTRICT Income Income <t< th=""></t<>					
Manufacturing Production	Dec.	258			
Food	Dec.	177	176	175	169
Month Month Month Age Age SIXTH DISTRICT INCOME AND SPENDING Interving Payrolls Jan. 142 140 137 132 Manufacturing Payrolls Jan. 142 140 137 132 Livestock Dec. 142 141 105 112 Livestock Dec. 142 141 341 Repayments Dec. 142 141 341 Repayments Jan. 106 108 107 108 Montarable Goods Jan. 106 103 104 104 105 Appel Jan. 105 104 104 105 105 Appel Jan. 105 104 104 101 101 Durable Goods Jan. 105 104 104 105 105 Durable Goods Jan. 105 104 104 105 105 104 104 105 105					
Paper	Dec.	204			
Latest Month Age Age Age SIXTH DISTRICT Income Latest Month Age Age INCOME AND SPENDING Jan. 142 140 137 132 Manufacturing Payrolls Jan. 142 140 137 132 Livestock Dec. 142 140 105 112 Livestock Dec. 142 246 137 131 Repayments Dec. 141 442 411 341 Repayments Jan. 106 103 102 105 Mondurable Goods Jan. 106 103 102 105 Apparel Jan. 106 104 104 105 113 Apparel Jan. 105 104 104 105 115 Chemicals Jan. 105 104 104 105 103 106 Durable Goods Jan. 105 104 104 105 105 105 105 105 106 106 106 106 106 106					
Month Months Age Age SIXTH DISTRICT Income and the second of the second			168		
Math Months Ago Ago SIXTH DISTRICT INCOME AND SPENDING Instalment control of the second s					
Latest Month Age Age Age XTH DISTRICT Latest Month Age Age ICOME AND SFENDING Janufacturing Janufacturing Janufacturing Janufacturing Manufacturing Dec. Jac Lize Jac Jac Farm Caching Dec. Jac Jac Jac Jac Instalment Credit at Banks (Mil. §) Dec. Al4 442 Jan Jac Nonfarm Employment Jan. Jan. Jac Jac Jac Jac Manufacturing Jan. Jac					
Nonelectrical Machinery	Dec.	384	401	405	353
Electrical Machinery					
FINANCE AND BANKING					
All Member Banks	Jan.	171	166	163	
Large Banks	Jan.	157	151	148	133
All Member Banks	Jan.				
Bank Debits*/**	Jan.				
ALABAMA					
Manufacturing Payrolls	Jan. Dec.				
Manufacturing	. Jan. Jan.				
Nonmanufacturing	Jan.	108	106	106	106
Farm Employment					

· · · · · · · · · · · · · · · · · · ·						
		Lates	st Month	One Month Ago	Two Months Ago	One Year Ago
Unemployment Rate (Percent of Work Force) Avg. Weekly Hrs. in Mfg. (Hrs.)	· ·	. Jan. . Jan.	5.2 41.0	5.6 41.2	5.3 40.9	4.9 40.6
FINANCE AND BANKING						
Member Bank Loans Member Bank Deposits Bank Debits**	 	. Jan. . Jan. . Jan.	166 151 169	163 147 158	162 1 49 159	141 131 131
FLORIDA						
INCOME						
Manufacturing Payrolls Farm Cash Receipts	::	. Jan. . Dec.	145 151	138 135	136 177	140 117
EMPLOYMENT						
Nonfarm Employment Manufacturing Nonmanufacturing Construction Farm Employment	· ·	. Jan. . Jan. . Jan. . Jan.	122 109 125 133 98	121 107 124 127 97	122 108 124 129	119 109 121 132
Unemployment Rate		. Jan.			96	97
Avg. Weekly Hrs. in Mfg. (Hrs.)	•••	. Jan. . Jan.	3.9 41.2	3.5 40.8	4.3 40.7	3. 9 41.0
FINANCE AND BANKING						
Member Bank Loans Member Bank Deposits Bank Debits**		. Jan. . Jan. . Jan.	188 175 194	182 172 196	177 170 197	160 151 157
GEORGIA						
INCOME						
Manufacturing Payrolls Farm Cash Receipts		. Jan. . Dec.	140 136	141 114	138 108	127 117
EMPLOYMENT						
Nonfarm Employment Manufacturing Nonmanufacturing Construction Farm Employment Unemployment Rate (Percent of Work Force) .	•••	. Jan, . Jan, . Jan, . Jan, . Jan, . Jan,	113 104 118 115 93	112 103 116 111 99	112 103 116 110 91	112 103 116 110 87
(Percent of Work Force) . Avg. Weekly Hrs. in Mfg. (Hrs.)	•••	. Jan. . Jan.	3.7 41.2	4.0 40.3	3.8 40.2	4.0 40.4
FINANCE AND BANKING						
Member Bank Loans Member Bank Deposits Bank Debits**	· ·	. Jan. . Jan. . Jan.	164 141 182	156 137 182	152 136 181	138 123 153
LOUISIANA						
INCOME						
Manufacturing Payrolls Farm Cash Receipts	: :	. Jan. . Dec.	134 109	128 1 2 6	129 120	127 99
EMPLOYMENT						
Nonfarm Employment Manufacturing Nonmanufacturing Construction Farm Employment Unemployment Rate	· · · · · ·	. Jan. . Jan. . Jan. . Jan. . Jan. . Jan.	107 103 108 95 85	105 99 106 85 85	105 98 106 82 75	106 102 107 93 85
Unemployment Rate (Percent of Work Force) Avg. Weekly Hrs. in Mfg. (Hrs.)	::	. Jan. . Jan.	6.0 42.9	6.8 42.6	6.8 42.3	6.5 42.4
FINANCE AND BANKING						
Member Bank Loans* Member Bank Deposits* Bank Debits*/**	· · ·	, Jan. . Jan. . Jan.	152 147 141	149 144 150	147 144 146	133 126 131
MISSISSIPPI						
INCOME Manufacturing Payrolls Farm Cash Receipts	· ·	. Jan. . Dec.	152 135	149 111	148 95	135 103
EMPLOYMENT Nonfarm Employment Manufacturing Nonmanufacturing Construction Farm Employment	· · · · · ·	. Jan. . Jan. . Jan. . Jan. . Jan.	112 114 111 110 98	111 113 110 101 83	111 112 110 102 86	110 110 111 116 98

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Lat	est Month	One Month Ago	Two Months Ago	One Yea r Ago	Lat	est Month	One Month Ago	Two Months Ago	One Year Ago
Unemployment Rate					EMPLOYMENT				
(Percent of Work Force) Jar Avg. Weekly Hrs. in Mfg. (Hrs.) Jar		3.8 40.8	4.6 41.2	4.7 40.0	Nonfarm Employment		112 108	112 107	112 108
FINANCE AND BANKING					Nonmanufacturing Jar Construction Jar	n. 116	115 118	115 115	115 123
Member Bank Loans* Jar Member Bank Deposits* Jar		168 149	170 149	153 136	Farm Employment Jar Unemployment Rate		92	84	91
Bank Debits*/**	. 166	158	167	139	(Percent of Work Force) Jar Avg. Weekly Hrs. in Mfg. (Hrs.) Jar		3.8 40.5	4.1 40.5	4.5 40.5
TENNESSEE									
INCOME					FINANCE AND BANKING				
Manufacturing Payrolls		144	139	134	Member Bank Loans* Jar Member Bank Deposits*	n. 147	163 146	162 145	144 130
Farm Cash Receipts Dec	. 109	170	104	102	Bank Debits*/** Jan	n. 154	154	159	134

Note: Indexes for bank debits, construction contracts, cotton consumption, employment, farm cash receipts, loans, deposits, petroleum production, and payrolls: 1967=100. All other indexes: 1957-59=100.

Sources: Manufacturing production estimated by this Bank; nonfarm, mfg. and nonmfg. emp., mfg. payrolls and hours, and unemp., U.S. Dept. of Labor and cooperating state agencies; conton consumption, U.S. Bureau of Census; construction contracts, F. W. Dodge Div., McGraw-Hill Information Systems Co.; petrol. prod., U.S. Bureau of Mines; industrial use of elec. power, Fed. Power Comm.; farm cash receipts and farm emp., U.S.D.A. Other indexes based on data collected by this Bank. All indexes calculated by this Bank.

Debits to Demand Deposit Accounts

Insured Commercial Banks in the Sixth District

(In Thousands of Dollars)

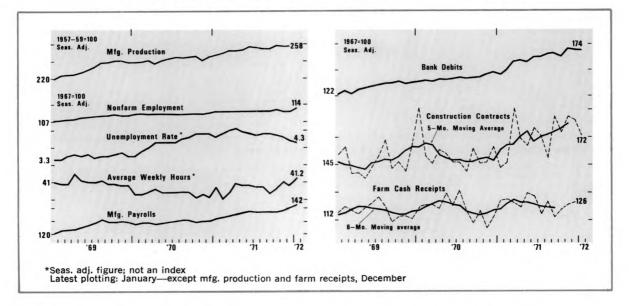
				Percent	Change					Percent	Chang
				Jan, 19	72 from					Jan. 19	72 fron
	Jan. 1972	Dec. 1971	Jan. 1971	Dec. 1971	Jan. 1971		Jan. 1972	Dec. 1971	Jan. 1971	Dec. 1971	Jan. 1971
STANDARD METROPOLITA	N					Gainesville	161,316	178,386	126,089	-10	-28
STATISTICAL AREAS						Lakeland	229,423	238,112	186,054	- 4	+23
						Monroe County	54,094	54,261	49,791	- 0	+ 9
Birmingham	3,009,116	2,647,599	2,122,695	+14	+ 42	Ocala	139,565	139,085	98,079	+ 0	+42
Gadsden	79,288	86,511	73,376	- 8	+ 8	St. Augustine	30,305	33,079	25,037	- 8	+21
Huntsville	253,165	287,991	222 143	12	+14	St. Petersburg	738,706	732,346	625,022	+ 0	+18
Mobile	825,270	866,841	675,764	- 5	+ 22	Sarasota	253,145	245,739	193,117	+ 3	+31
Montgomery	493,637	536,428	409,314	- 8	+21		1,464,147	1,656,174	1,355,608	-12	+ 8
Tuscaloosa	158,045	159,548	133,040	~ 1	+19	Winter Haven	13 9 ,634	128,109	106,689	+ 9	+31
Ft. Lauderdale						Athens	126,405	146,543	140,987	15	-10
Hollywood	1,649,429	1,564,506	1,300,248	+ 5	+27	Brunswick	79,203	86,628	62,307	- 9	+27
Jacksonville	2,549,274	2,786,278	1,970,677	- 8	+29	Dalton	151,990	162,092	124,563	- 6	+22
Miami	5,323,533	5,407,192r	4,259,391	1	+25	Elberton	16,282	18,788	16,652	13	- 2
Orlando	1,118,567	1,224,925	912,935	~ 9	+23	Gainesville	99,881	102,017	95,058	- 2	+ 5
Pensacola	367,611	393,675	310,234	- 7	+19	Griffin	52,695	55,351	47,302	- 5	+11
Tallahassee	537,185	502,742	227,769	+ 7	+136	LaGrange	32,018	32,616	26,195	· · 2	+22
Tampa-St. Pete.	3,055,627	3,116,269	2,607,638	- 2	+17	Newnan	39,388	47,505	28,631	-17	+38
W. Palm Beach	904,004	876,009	779,562	+ 3	+16	Rome	114,376	123,832	97.017	- 8	+18
						Valdosta	88,658	85,722	67,488	+ 3	+31
Albany	156,462	160,246	132,642	- 2	+18						
	9,537,008	10,704,780	7,959,200	11	+20	Abbeville	16,985	19,291	16,175	-12	+ 5
Augusta	388,376	440,484	348,906	-12	+11	Alexandria	192,307	180,262	184,390	+ 7	+ 4
Columbus	350,840	391,972	294,466	-10	+19	Bunkie	9,006	10,487	8,487	-14	+ 6
Macon	430,868	447,549	368,535	- 4	+17	Hammond	59,853	61,180	49,728	- 2	+20
Savannah	418,170	463,550r	360,829	-10	+16	New Iberia	54,136	55,123	53,448	- 2	+ 1
						Plaquemine	17,746	15,859	17,783	+12	- 0
Baton Rouge		975,801	818,632	+ 4	+24	Thibodaux	41,343	36,346	37,948	+14	+ 9
Lafayette	205,789	212,692	185,579	- 3	+11						
Lake Charles	209,808	206,580	182,210	+ 2	+15	Hattiesburg	97.632	98.435	82.403	- 1	+18
New Orleans	3,222,736	3,688,732	3,163,528r	13	+ 2	Laurel	53,772	58,594	51.614	8	+ 4
						Meridian	94,554	98,391	78,971	4	+20
Biloxi-Gulfport	203,398	190,013	165,190	17	+23	Natchez	49,602	52,037	41,565	. 5	-19
Jackson	1,009,009	1,093,226	848,208	- 8	+19	Pascagoula-	45,002	52,057	41,505	. 3	-19
						Moss Point	107.512	120.470	87.936	11	+22
Chattanooga	1.038.272	1,101,485	1.015.360	- 6	+ 2	Vicksburg	54,368	60,248	57,419	-10	- 5
Knoxville	684,197	779,798	626,635	- 12	+ 9	Yazoo City	39,117	36,982	35,534	+ 6	+10
	2,390,714	2,575,624	1,893,039	- 7	+26		00,117	30,502	00.001	1.0	110
OTUER CENTERS						Bristol	112,588	127,017	100,248	-11	+12
OTHER CENTERS						Johnson City	126,215	138,967	119,151	- 9	+ 6
Anniston	88,917	95.391	82,280	- 7	+ 8	Kingsport	200,071	206,276	170,397	- 3	+17
Dothan	115,929	124,647	99,464	- 7	+17						
Selma	58,806	69,282	50,022	15	18	District Total	54,862,176	57,674 ,42 1r	45,882,210r	- 5	+20
Bartow	45.874	44.025	42,252	+ 4	+ 9	Alabamat	6 930 616	6 603 603	E 071 705	1.2	1.00
Bradenton	45,874	142,781	42,252	+ 4	+ 9 +12			6,603,507	5,271,725	+ 3	+30
Brevard County	239.624	286,857r	242,944	-16	- 1	Florida‡		19,882,883r		- 2	+24
Daytona Beach						Georgia‡		15,587,731r			+18
Ft. Myers-	150,494	133,681	114,165	+13	+32	Louisiana†*		6,333,226	5,474,553r	- 7	+ 8
	105 021	100.025	167 664	- 2			2,291,201	2,405,834	1,936,901	- 5	+18
N. Ft. Myers	185,831	190,025	167,564	- 2	+11	Tennesseet*	6,229,549	6,861,240	5,491,173	- 9	+13

¹Estimated ²Includes only banks in the Sixth District portion of the state; partially estimated.

"Partially estimated. NA-Not available.

FEDERAL RESERVE BANK OF ATLANTA

District Business Conditions



Expansion in the regional economy is becoming more broadly based. Although the pace of automobile sales and construction is now more subdued than in late 1971, employment has shown widespread increases in both manufacturing and nonmanufacturing. Consumer and business loan demand from banks has expanded further. With agricultural prices edging upward, farm cash receipts are at a new high.

January data indicate further firming in the District's labor market. The gains were evenly spread among manufacturing and nonmanufacturing sectors. Construction employment, which held up much better than seasonally anticipated, was particularly buoyant. A continued lengthening of the factory workweek was another bright spot. Available information suggests that the unemployment rate dropped in January for the fourth consecutive month.

In January, the value of construction contract awards declined. Nonresidential awards were down for the second consecutive month. Residential awards were also off, but for the first month since October. Nevertheless, the level was two-thirds higher than it was in January 1971. Savings and loan associations experienced record deposit inflows in January, indicating continued availability of ample funds to support construction.

The strength in bank lending that developed late last year carried over into the first two months of this year. At the larger District banks, consumer and real estate loans continued to advance, and business loan demand was strengthened by increased borrowing on the part of durable and nondurable goods manufacturing firms. Total deposit gains continued to be outpaced by record time deposit inflows, since gains in household, business, and government time deposits remained strong.

Consumer instalment credit at commercial banks continued to expand in January. The amount of the increase, however, was much smaller than in any of the last three months of 1971. This was primarily the result of reduced gains in automobile credit and nonautomotive consumer goods credit. In January, sales of domestically produced cars were only moderately strong.

Average prices received by farmers edged upward in January, in spite of a 22-percent decline in egg prices. Sharp price increases for hogs and broilers provided most of the strength of the price advance, but cotton, corn, and grapefruit prices also moved higher. Egg prices continued to decline in February, but prices of all meat animals retained their strength. Farm cash receipts in 1971 totaled \$5.8 billion, \$400 million above the 1970 figure.

NOTE: Data on which statements are based have been adjusted whenever possible to eliminate seasonal influences.