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In This Issue:

Reserves Management Strategy and
the Carry-Forward Provision

Capital Spending for
Pollution Abatement

District Business Conditions

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Reserves Management Strategy and the Carry - Forward Provision

by Stuart G. Hoffman

Regulation D of the Federal Reserve Act requires member banks to maintain reserves in vault cash or with their District Federal Reserve Bank equal to a specified fraction of their deposit liabilities. A reserve deficiency greater than 2 percent of a member bank's requirement is penalized at a rate of two percentage points above the prevailing Federal Reserve Bank discount rate. Member banks are permitted to carry a reserve deficiency up to 2 percent of their required reserves forward only one week without penalty. An amendment to Regulation D on September 12, 1968, permitted member banks to carry forward one week a reserve excess as well. Those excess reserves carried forward could then be used to satisfy the banks' current statement week reserve requirements, opening up a new opportunity for a member bank's reserves manager.

This study seeks to determine to what degree Sixth District member banks have taken advantage of this reserves management opportunity since its inception in September 1968. It is hypothesized that a member bank's reserves manager's actions in each statement week will take account of any reserve excess or deficiency brought forward from the previous week and the possibility of carrying forward a current period excess or deficiency into the following settlement week. Such a strategy¹ would encompass a moving

¹Decision rules one to three can be conveniently expressed algebraically as:

1. If $PBF = 0$, then $-2\% \leq E \leq 2\%$,
2. if $PBF > 0$, then E should be negative and within the range
 $PBF \leq |E| \leq PBF + 2\%$,
- and 3. if $PBF < 0$, then E should be positive and within the range
 $|PBF| \leq E \leq |PBF| + 2\%$,

where PBF is the potential (excess or deficiency) brought forward and E is the current period's excess reserves not accounting for the brought forward, each expressed as a percent of the current week's required reserves. A negative value for E or PBF represents a current period reserve deficiency or a deficiency brought forward, respectively.

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three-week horizon (the previous, current, and following statement weeks) and would entail the following set of decision rules:

- 1. If no reserve excess or deficiency is brought forward from the previous statement week, then reserves in the current week should be maintained in the range of ± 2 percent of required reserves;
- 2. if a reserve **excess** is brought forward, then a reserve **deficiency** should be maintained in the current week at least equal (in absolute value) to the excess brought forward but no greater than that amount plus 2 percent of the current week's required reserves; and
- 3. if a reserve **deficiency** is brought forward, then a reserve **excess** should be maintained in the current week at least equal to the deficiency brought forward (in absolute amount) but no greater than that amount plus 2 percent of the current week's required reserves.

Using this strategy, a reserves manager will vary his current reserve position (E) inversely and dollar for dollar with his potential brought forward (PBF). Analysis of Sixth District reserve city and country member banks² suggests that reserves managers at the former class of banks adopted such a strategy soon after the amendment to Regulation D. However, country bank reserves managers did not generally adopt this strategy until 1974.

As an illustration of decision rule one, consider line 1 in Table 1. In this example, the subject bank is assumed to enter the current statement week with zero potential brought forward (PBF). If the bank maintains legal reserves within ± 2 percent of its required reserves, then the total excess or deficiency may be carried forward to the next period (PCF). A current period reserve deficiency of more than 2 percent of required reserves would result in a penalty, while a reserve excess greater than 2 percent of required reserves would entail an opportunity cost.³ A reserve excess (deficiency) less than 2 percent of required reserves does not entail an opportunity cost (penalty) if it is fully used in the following week to offset a like reserve deficiency (excess).

Line 2 in Table 1 illustrates decision rule two, which assumes that the bank enters the

Table 1 ILLUSTRATION OF DECISION RULES ONE THROUGH THREE					
Line	Potential Brought Forward	E (Strategic range)	Potential Carry Forward	Deficiency Subject to Penalty	Actual Brought Forward
1	0	-2% to 2%	-2% to 2%	None	0
2	1%	-1% to -3%	0 to -2%	None	1%
3	-2%	2% to 4%	0 to 2%	None	-2%

current statement week with a potential 1-percent reserve excess brought forward. If the bank maintains legal reserves 1 to 3 percent less than its current required reserves, then its 1-percent excess brought forward will be fully used and the bank will be able to carry forward any current net deficiency without penalty. If, instead, the bank has a reserve deficiency in the current week greater than 3 percent of its required reserves, a penalty will be incurred. Alternatively, if the bank has a reserve deficiency less than 1 percent of its required reserves or a reserve excess of any amount, then the 1-percent excess potentially brought forward will not be fully utilized, resulting in an opportunity cost.⁴

Finally, decision rule three is illustrated in line 3 in Table 1. In this case, it is assumed that the bank enters the current statement week with a 2-percent reserve deficiency brought forward. If the bank maintains legal reserves 2 to 4 percent above its reserve requirement, then its previous period's 2-percent deficiency brought forward will be fully offset and any current net excess can be totally carried forward. A reserve excess less than 2 percent of required reserves or a reserve deficiency of any amount would result in a penalty, while a reserve excess greater than 4 percent of required reserves would entail an opportunity cost.

One implication of decision rules one through three is that the reserve position (E) should fluctuate from plus to minus in successive statement weeks. This feature is illustrated in Table 2,

²The reserve city category used herein includes 20 member banks and is not strictly comparable to the reserve city classification as defined in a November 1972 amendment to Regulation D. The country bank category includes all member banks other than the 20 reserve city banks.

³When a bank holds excess reserves above the amount it can permissibly carry forward, it foregoes the opportunity to invest those funds in an earning asset such as Federal funds. The maximum amount of interest that could have otherwise been earned (the best alternative return) is a measure of the opportunity cost.

⁴The actual brought forward (ABF) is the amount of the potential brought forward (PBF) actually used in the current statement week. If the bank's excess reserve position (E) is in the strategic range, then all of the potential brought forward will be used. (ABF will equal PBF.)

Table 2

ILLUSTRATION OF A STRATEGICALLY MANAGED RESERVE POSITION

Week	PBF	E	Net Reserve Position (E + PBF)	PCF	Deficiency Subject to Penalty	ABF	E* ¹
1	0	-2%	-2%	-2%	None	0	0
2	-2%	3%	1%	1%	None	-2%	0
3	1%	-2%	-1%	-1%	None	1%	0
4	-1%	3%	2%	2%	None	-1%	—

$$E_t^* = E_t + ABF_t - ABF_{t+1}$$

which contains an example of a representative bank's reserves management strategy over a period of four statement weeks. It assumes that the bank starts week one without any reserve excess or deficiency brought forward; therefore, the bank's reserves manager can set E between ± 2 percent of required reserves.

In the example, the manager decides on a first-period reserve deficiency of 2 percent, which is permissibly carried forward to the next period. Thus, in week two, the reserves manager inherits a 2-percent deficiency. In that week, the manager provides for a reserve excess equal to 3 percent of required reserves. This leaves a net excess of 1 percent which can be fully carried forward to week three. The 2-percent deficiency potentially brought forward into week two is totally offset by that period's 3-percent excess; therefore, the actual brought forward (ABF) in period two is equal to the potential brought forward (PBF). In week three, which begins with a 1-percent excess brought forward, the manager arranges a reserve deficiency equal to 2 percent of required reserves. This totally offsets the 1-percent excess brought forward, and the remaining 1-percent net deficiency is carried forward to the next period without penalty. In week four, the reserves manager maintains legal reserves 3 percent above the bank's required reserves. This completely offsets the 1-percent deficiency brought forward, while the remaining 2-percent net excess can be carried forward to week five (not shown). As intended, Table 2 illustrates the plus/minus pattern in successive weeks of a reserve position managed in accordance with decision rules one through three.

A second feature of this reserves management strategy is that the current period's reserve position adjusted for the actual brought forward

into and carry forward out of the period (E^*)⁵ should equal zero. Look again at line 2 in Table 2. That week begins with an inherited 2-percent reserve deficiency which the 3-percent reserve excess more than offsets. The 1-percent net excess in week two is carried forward to week three, where it is used to partially offset that period's 2-percent reserve deficiency. Consequently, all of period two's 3-percent excess is actually used to offset the prior and following weeks' deficiencies, resulting in no opportunity cost or penalty.⁶

In summary, E_t^* is influenced by: (1) reserves management in period $t-1$ to the extent this determines the amount carried forward to the following week; (2) reserves management in period t to the extent this determines the ABF in that period and the amount potentially carried forward to period $t+1$; and (3) reserves management in period $t+1$ to the extent this determines the ABF in that period. This reiterates the point that the hypothesized reserves management strategy necessarily entails a moving three-week horizon centered on the current statement week.

To determine whether District member banks' reserves managers have varied their reserve positions inversely with their potential brought forwards as decision rules one through three suggest, the following equation is estimated by multiple regression analysis:

$$[1] E_t = a_0 + a_1 PBF_t + a_2 (r_f - r_d)_t + e_t$$

This equation includes the spread between the Federal funds rate (r_f) and the Federal Reserve Bank of Atlanta discount rate (r_d) as an additional explanatory variable. This rate spread measures the difference between the bank's opportunity cost of holding excess reserves above that amount which can be carried forward and the adjustment cost of borrowing from the Atlanta Federal Reserve Bank to satisfy its reserve requirement. The expectation is that the bank's reserve position will be inversely related to this variable, implying its estimated regression coefficient (a_2) should be negative. Likewise, the banks' reserve positions are expected to vary inversely and dollar for dollar with their potential brought forwards, implying the estimated regression coefficient of PBF (a_1) should be equal to -1 .

⁵In algebraic terms, $E_t^* = E_t + ABF_t - ABF_{t+1}$

⁶For week two, $E_2 = 3\%$ and $ABF_2 (= PBF_2) = -2\%$, while for week three, $ABF_3 (= PBF_3) = 1\%$; therefore, $E_2^* = E_2 + ABF_2 - ABF_3 = 3\% - 2\% - 1\% = 0$.

Table 3

**ESTIMATED REGRESSION COEFFICIENTS FROM EQUATION [1] FOR RESERVE CITY BANKS
DEPENDENT VARIABLE: EXCESS RESERVES AS A PERCENTAGE OF REQUIRED RESERVES**

Period	Constant	Potential Brought Forward as a Percentage of Required Reserves	$(r_f - r_d)$	R^2	Standard Error	DW
October 1968-1969	0.333 (1.309)	-1.084* (-4.266)	0.003 (0.053)	0.210	0.536	1.734
1970	0.684* (3.158)	-1.045* (-3.536)	-0.042 (-0.658)	0.274	0.512	2.185
1971	0.309 (1.518)	-1.260* (-3.344)	-0.149 (-1.154)	0.249	0.545	1.909
1972	0.784 (1.664)	-1.935* (-2.990)	0.475 (1.606)	0.175	1.313	2.333
1973	1.461* (2.452)	-1.841* (-4.124)	0.026 (0.136)	0.332	1.045	1.955
1974	0.812* (2.425)	-1.837* (-4.054)	0.012 (0.137)	0.350	0.736	1.799
1975	0.955* (4.904)	-1.952* (-5.906)	0.139 (0.765)	0.524	0.606	2.123
October 1968-1975	0.772* (6.729)	-1.527* (-9.493)	0.035 (1.221)	0.269	0.822	1.921

*Statistically significant at the one-percent level

NOTE: t-statistics given in parentheses

Empirical Results

The reserves management behavior of both District reserve city and country member banks was analyzed during the period from immediately after the September 1968 amendment to Regulation D through the end of 1975. Multiple regression analysis was used to empirically estimate equation [1], using weekly data for reserve city and country banks. The estimated equations for yearly subperiods are presented in Tables 3 through 6.

In each yearly subperiod, there is a significant inverse relationship between the reserve city banks' aggregate reserve position and their potential brought forward, both expressed as a percentage of required reserves (see Table 3). As hypothesized, the regression coefficient on PBF is not significantly different from -1 in any yearly subperiod, except 1975. These regression

coefficients ranged from a high of -1.045 in 1970 to a low of -1.952 in 1975. Table 4 contains empirical estimates of the dollar amount equivalent of equation [1]. In these equations, the dollar level of reserve city banks' excess reserves is regressed on the dollar level of their potential brought forward and the interest rate spread. As before, in each yearly subperiod there is a significant inverse relationship between the banks' reserve position and their potential brought forward.

One implication of these estimated equations is that a given reserve excess (deficiency) potentially brought forward from the previous week is offset by an approximately equal reserve deficiency (excess) in the current statement week. District member reserve city banks apparently adopted a reserves management strategy represented by decision rules one through three. These banks have made efficient use of the carry-forward provision

Table 4

**ESTIMATED REGRESSION COEFFICIENTS FROM EQUATION [1] FOR RESERVE CITY BANKS
DEPENDENT VARIABLE: DOLLAR LEVEL OF EXCESS RESERVES**

Period	Constant	Dollar Level of Potential Brought Forward	$(r_f - r_d)$	\bar{R}^2	Standard Error	DW
October 1968-1969	4,304.6* (3.544)	-0.905* (-4.203)	11.323 (0.024)	0.203	3,998.77	1.861
1970	5,033.6* (4.660)	-1.112* (-4.857)	-362.017 (-0.780)	0.300	3,832.75	2.169
1971	2,850.8* (3.080)	-1.199* (-4.343)	-1,150.110 (-1.106)	0.261	4,479.71	1.920
1972	9,015.8* (3.902)	-1.571* (-2.992)	4,088.580 (1.577)	0.167	11,498.50	2.226
1973	9,447.2* (2.489)	-1.971* (-5.354)	659.514 (0.422)	0.348	8,462.35	1.929
1974	8,421.7* (3.255)	-1.628* (-5.410)	203.776 (0.259)	0.354	6,885.10	1.815
1975	10,411.2* (8.030)	-1.616* (-7.470)	1,010.140 (0.611)	0.521	5,539.89	2.113
October 1968-1975	6,957.6* (11.625)	-1.459* (-11.510)	242.974 (0.987)	0.261	7,083.30	1.903

*Statistically significant at the one-percent level

NOTE: t-statistics given in parentheses

by viewing excess reserves brought forward no differently than reserves currently maintained and reserve deficiencies brought forward no differently than currently required reserves.

Empirical estimates of equation [1], in both percentage of required reserves and dollar level form, for District member country banks are presented in Tables 5 and 6, respectively. These estimates show that the relationship between the country banks' aggregate reserve position and their potential brought forward was *not* consistently inverse from year to year. In the October 1968-69, 1972, and 1973 subperiods, the relationship was unexpectedly positive, though not significantly so. In 1970, 1971, 1974, and 1975, the relationship was inverse, although significant in only the last two years. One implication of

these estimated equations is that District member country banks did *not* make use of the carry-forward provision until 1974. Record high short-term interest rates (and, thereby, opportunity costs) in 1974 apparently induced the country banks to adopt a reserve management strategy represented by decision rules one through three, a habit they maintained in 1975 despite the decline in short-term rates during that year.⁷

⁷Tables 5 and 6 do not report empirical estimates of equation [1] for the entire sample period in light of the apparent structural shift in country bank reserves management behavior beginning in 1974. Estimated regression coefficients from such an estimation would undoubtedly be biased. Instead, the tables report estimations of equation [1] using post-1973 data, the period following the apparent shift in behavior.

Table 5

ESTIMATED REGRESSION COEFFICIENTS FROM EQUATION [1] FOR COUNTRY BANKS
DEPENDENT VARIABLE: EXCESS RESERVES AS A PERCENTAGE OF REQUIRED RESERVES

Period	Constant	Potential Brought Forward as a Percentage of Required Reserves	$(r_f - r_d)$	R^2	Standard Error	DW
October 1968-1969	2.895* (3.829)	0.917 (1.086)	-0.393* (-4.718)	0.363	0.619	1.625
1970	3.085* (6.707)	-1.026 (-1.736)	0.005 (0.079)	0.021	0.500	1.821
1971	2.516* (4.515)	-0.744 (-0.968)	-0.305** (-2.214)	0.058	0.572	1.118
1972	1.184* (2.401)	1.035 (1.519)	0.283** (2.408)	0.109	0.523	1.837
1973	1.380* (2.883)	0.715 (1.132)	-0.087 (-1.070)	0.021	0.431	1.893
1974	2.029* (7.543)	-0.936** (-2.273)	-0.129* (-2.975)	0.163	0.370	1.620
1975	1.781* (7.865)	-0.975* (-2.545)	-0.143 (-0.962)	0.093	0.498	2.122
1974-1975	1.827* (11.515)	-0.932* (-3.377)	-0.675 (-2.843)	0.131	0.437	1.942

*Statistically significant at the 1-percent level

**Statistically significant at the 5-percent level

NOTE: t-statistics given in parentheses

There are at least two important explanations why District member reserve city banks made use of the carry-forward provisions while country banks did not, at least until 1974. First, managing a reserve position in accordance with decision rules one through three involves certain reserve adjustment costs. The costs typically take the form of a fixed cost⁸ and a variable component dependent upon the dollar volume of the adjustment transaction. Thus, the average cost of a reserve transaction declines as the dollar volume of the transaction rises. Reserve city

banks tend to be larger than country banks, on average, meaning that a 1-percent reserve excess represents a larger dollar amount for the former than for the latter. Therefore, the transaction cost per dollar of reserve adjustment is smaller for the reserve city bank. This makes it relatively more profitable for the reserve city bank to adjust its reserve position for a given opportunity cost.

When short-term interest rates rose to historically high levels in 1974, the higher transaction cost per dollar of reserve adjustment for country banks was no longer a deterrent and they were able to profitably manage their reserve positions more closely. Once having gained experience with an efficient reserve management strategy (possibly reducing the fixed cost element

⁸A large part of the fixed cost is the salary paid to the reserves manager specialist and his staff.

Table 6

**ESTIMATED REGRESSION COEFFICIENTS FROM EQUATION [1] FOR COUNTRY BANKS
DEPENDENT VARIABLE: DOLLAR LEVEL OF EXCESS RESERVES**

Period	Constant	Dollar Level of Potential Brought Forward	$(r_f - r_d)$	\bar{R}^2	Standard Error	DW
October 1968-1969	32,934.0* (4.905)	0.167 (0.208)	-3,326.73* (-4.743)	0.271	5,730.24	1.523
1970	32,667.7* (6.576)	-0.995 (-1.661)	-195.484 (-0.297)	0.015	5,353.52	1.782
1971	34,567.1* (5.463)	-1.270 (-1.740)	-3,259.03** (-2.163)	0.081	6,355.26	1.076
1972	22,279.1* (3.245)	0.403 (0.578)	4,129.80* (2.719)	0.107	6,726.11	1.694
1973	21,190.4* (3.245)	0.444 (0.702)	-698.965 (-0.620)	0.022	6,128.24	1.843
1974	31,466.2* (7.526)	-0.927** (-2.267)	-1,770.31* (-2.597)	0.142	5,897.17	1.600
1975	27,328.5* (7.847)	-1.036* (-2.647)	-2,109.97 (-0.925)	0.101	7,635.81	2.088
1974-1975	27,903.0* (11.359)	-0.946* (-3.369)	-638.28 (-1.733)	0.105	6,842.60	1.882

*Statistically significant at the 1-percent level

**Statistically significant at the 5-percent level

NOTE: t-statistics given in parentheses

of the adjustment costs), country banks continued the practice throughout 1975 despite declining short-term interest rates.

This experience is analogous to recent money management behavior of individuals and businesses. From mid-1974 until early 1976, the demand deposit component of the money stock did *not* grow as rapidly as previous experience would suggest, given the growth of national income and level of interest rates. One explanation offered for the accumulated shortfall in actual money demand deposits relative to that amount expected is that the money demand function shifted downward sometime in 1974 in response to that year's record-high interest rates. Once having learned the technique of minimizing money balances, individuals and businesses continued the practice during 1975 despite falling short-term interest rates,

much the same as District member country banks did in managing their reserve positions.

A second explanation for the observed change in country bank reserves management behavior in 1974 is related to an institutional change initiated around that time by the Federal Reserve Bank of Atlanta. Beginning May 17, 1973, in its Atlanta office and early 1974 in its Jacksonville office, the Reserve Bank's Accounting Department made available to each member bank its daily reserve position and the projected amount needed throughout the remainder of the reserve settlement week. This information, which explicitly includes the amount potentially brought forward, was added to the daily reserve statement of each member bank in those two zones, which currently comprise 61 percent of all Sixth District member banks and account for 55 percent of District required

reserves. Armed with this necessary information, some country bank reserves managers no doubt began varying their reserve positions inversely with their brought forwards, thus eliminating excessive opportunity costs and penalties. It is likely, then, that this new service contributed to the improved reserves management behavior of country banks observed beginning in 1974.

A surprising result from the regression analysis was the insignificant relationship in each yearly subperiod between the reserve city banks' aggregate reserve position and the Federal funds-discount rate spread. In some years (1972, 1974, and 1975), the regression coefficient on the spread variable was positive, contrary to expectations. One explanation of this lack of relationship may be that the 2-percent ceiling on reserve carry-overs is actually no limitation at all for reserve city banks. For the entire sample period, reserve city banks' excess reserves as a percentage of their required reserves averaged only 0.3 percent. Therefore, reserve city banks were rarely in a position where their reserve excess or deficiency could not be carried over in full to the following week without opportunity cost or penalty, respectively. Thus, the contemporaneous Federal funds-discount rate spread, which reflects opportunity cost and penalty considerations, was not of significant importance to reserve city banks' management strategies.⁹

For all member country banks, excess reserves as a percentage of required reserves averaged 1.92 percent during the entire sample period. No doubt the 2-percent ceiling on carry-overs was truly imposing for many country banks that consistently maintained reserves well in excess of 2 percent of their required amount. Thus, the Federal funds-discount rate spread as a measure of opportunity cost-reserve adjustment cost differential should have been more relevant to the reserves management strategy of country banks in general. Looking at Tables 5 and 6, there is a significant inverse relationship between the country banks' aggregate reserve position and the rate spread variable in three of the yearly subperiods (October 1968-69, 1971, and 1974). In the other years, the relationship is inverse but insignificant, except for 1972 when there was an unexpected significant direct rela-

tionship. Thus, while country bank reserves managers were relatively more sensitive to the opportunity cost of maintaining reserves well in excess of 2 percent of their requirements, reserve city banks managers were more efficient at balancing reserve excesses (deficiencies) permissibly brought forward against approximately equal reserve deficiencies (excesses) in the current statement week, at least up until 1974. ■

Bank Announcements

May 24, 1976

FIRST COMMERCIAL NATIONAL BANK
Lakeland, Florida

Opened for business as a member. Officers: Robert G. Wagner, president; J. Morgan Christian, vice president and cashier. Capital, \$600,000; surplus and other funds, \$600,000.

June 18, 1976

**CENTURY NATIONAL BANK OF
PALM BEACH COUNTY**
West Palm Beach, Florida

Converted to a national bank from Northwood Bank of West Palm Beach.

⁹What may be of importance to a reserve city bank's reserves manager is his expectation of future weeks' Federal funds and discount rates. Lacking a reliable measure of reserves managers' interest rate expectations, this potential influence was not examined in this study. However, if expectations of future rates are heavily influenced by current rates, given that weekly changes in the Federal funds and discount rates tend to be small, then their current rates could be viewed as good proxies for their expected future values.

Sixth Federal Reserve District:

Capital Spending for Pollution Abatement

by William D. Toal

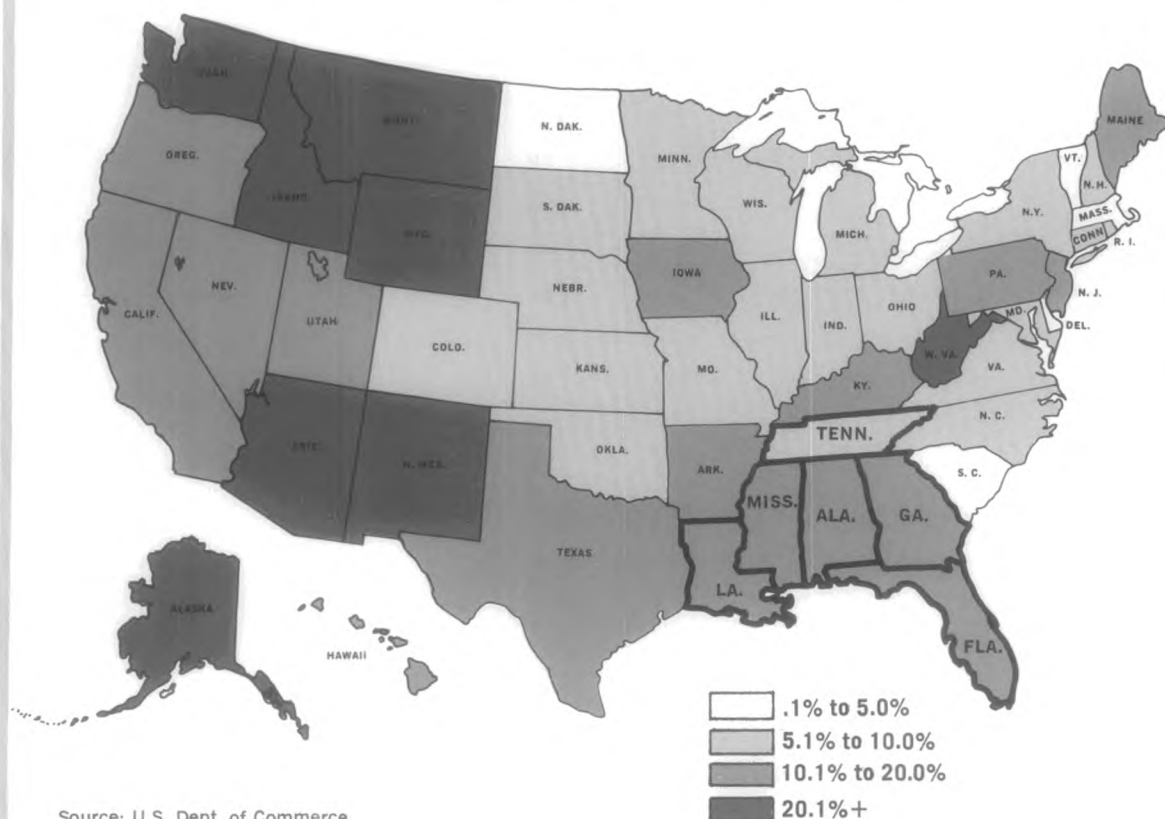
Since the Clean Air and Clean Water Acts were enacted in 1970, the U.S. economy has directed a substantial portion of its resources toward cleaning up the environment. Business and industry must spend money to adjust production processes or add new equipment to control and remove pollutants, channeling resources into new areas. This leaves fewer resources available for previous types of production. A reallocation of economic resources translates into higher prices for some products and/or reduced production. By 1975, U.S. manufacturers put 9.3 percent of their capital spending into reducing air, water, and solid waste pollution. This amounted to nearly \$4.5 billion, five times more than that spent in the late 1960's.

Until now, no information has been available to document regional patterns of pollution abatement spending. However, a government report was recently published, giving state-by-state manufacturers' capital spending for pollution control for 1973.¹ Some of the results are surprising. We might expect the Midwest, with its relatively heavy industrialization, to spend most heavily on pollution abatement; surprisingly, though, it is the Southeast which has generally put a larger-than-national fraction of its capital outlays into pollution control.

If 1973 is typical of recent years, the South and the West spend the most on pollution abatement relative to total capital spending by manufacturers (see map). The chart spells out the experience of Sixth Federal Reserve District manufacturers. All states except Tennessee channeled larger-than-national shares of capital spending into pollution control. The District states' total was 10.1 percent of capital spending (\$332.6 million) for pollution abatement, compared with 8.9 percent for the entire nation.

¹**Pollution Abatement Costs and Expenditures, 1973**, U.S. Bureau of the Census, Current Industrial Reports, Series MA-200(73)-2, Washington, D.C., 1976.

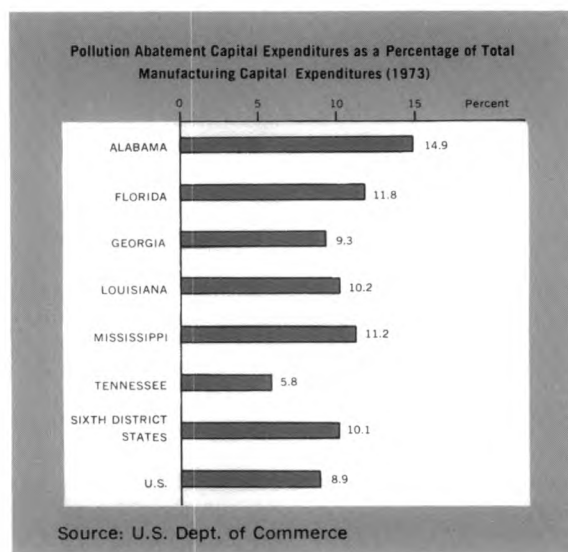
**Manufacturers' Pollution Abatement Capital Expenditures
as a Percentage of Total Capital Expenditures, by State (1973)**



Why more intense pollution abatement spending in the Sixth District? Industry mix certainly had some influence. Nationally, four manufacturing industries spent over 10 percent of capital investment on pollution abatement in 1973. Of these, only primary metals is less important in the District than nationally; the other three industries—paper, petroleum, and chemicals—are all relatively more important in the Southeast's manufacturing sector.

Even among other industries, Sixth District manufacturers were allocating a greater chunk of total capital spending to pollution abatement than was true nationally (see Table). Paper and primary metals were particularly big spenders on pollution abatement; in the District, these industries spent significantly more than in the nation. At the same time, District furniture, fabricated metals, transportation equipment, and nonelectrical machinery industries put relatively much more of their capital outlays into pollution control than their national counterparts.

Among District states, capital spending on



**POLLUTION ABATEMENT CAPITAL EXPENDITURES AS
A PERCENT OF TOTAL CAPITAL EXPENDITURES**

(1973)

	<u>Ala.</u>	<u>Fla.</u>	<u>Ga.</u>	<u>La.</u>	<u>Miss.</u>	<u>Tenn.</u>	<u>District States</u>	<u>U. S.</u>
Total Manufacturing	14.9	11.8	9.3	10.2	11.2	5.8	10.1	8.9
Food Processing	3.0	14.2	6.7	7.9	15.8	5.1	8.8	8.2
Textiles	6.3	—	1.8	—	10.4	5.1	3.3	2.7
Apparel	—	—	—	—	—	—	—	—
Lumber	10.6	1.6	5.1	8.5	1.8	17.0	6.4	6.6
Furniture	—	—	5.7	—	4.5	18.6	12.9	5.7
Paper	28.2	47.0	28.7	—	—	17.5	31.0	22.2
Printing	—	—	—	—	3.1	8.9	7.6	0.7
Chemicals	14.2	16.2	10.8	10.7	27.3	4.6	10.5	12.4
Petroleum	N.A.	12.5	25.0	16.2	—	—	17.5	29.1
Rubber	0.8	—	3.0	—	—	1.1	1.3	1.9
Stone, Clay, and Glass	—	12.8	4.5	8.9	17.0	2.9	8.4	10.8
Primary Metals	42.2	1.0	10.1	—	—	—	34.5	21.4
Fabricated Metals	5.8	1.0	3.5	—	18.1	11.4	8.0	3.7
Nonelectrical Machinery	1.7	1.0	1.5	—	2.4	36.1	21.6	2.4
Electrical Machinery	2.1	1.0	1.8	1.3	—	8.9	6.1	2.6
Transportation Equipment	11.4	1.0	5.5	—	—	9.6	8.7	4.0
Instruments	—	N.A.	—	—	—	—	—	1.9

N. A. — Not Available
Source: U.S. Dept. of Commerce

pollution abatement varied according to industry. Pollution abatement spending amounted to 42 percent of capital spending in Alabama's large primary metals industry, 47 percent of Florida's paper industry spending, and 36 percent of Tennessee's non-electrical machinery industry spending (see Table).

Capital expenditures on pollution abatement are not the only costs involved in cleaning up the environment. Day-to-day operating costs are also increased. For Sixth District states, this came to \$241 million in 1973, or about three-quarters of the capital outlays on pollution abatement.

Also, some plants and facilities have been completely closed down because they do not meet antipollution standards. Therefore, the total costs of maintaining cleaner air and water standards are certainly understated here. However, the larger percentage of total capital spending Sixth Federal Reserve District manufacturers put into pollution abatement suggests that the reallocations and redirection of resources in the effort to clean up the environment were strikingly more acute in the region's manufacturing sector (particularly in certain industries) than they were nationally.

CARIBBEAN BASIN ECONOMIC SURVEY

A bimonthly newsletter which summarizes and analyzes economic conditions, issues and specific industries in the Caribbean Basin (Mexico; Colombia; and Venezuela; Central America, including Belize and Panama; the Caribbean Islands; and Guyana, Surinam, and French Guiana). If you would like to be placed on the free subscription list, please notify the Research Department, Federal Reserve Bank of Atlanta, Federal Reserve Station, Atlanta, Georgia 30303. Multicopy and bulk subscriptions are not available.

THE IMPACT OF HOLDING COMPANY AFFILIATION ON BANK PERFORMANCE: A CASE STUDY OF TWO FLORIDA MULTIBANK HOLDING COMPANIES—NOW A RESEARCH PAPER

Available as the first in a series of Federal Reserve Bank of Atlanta Research Papers. Single copies are available upon request to the Research Department, Federal Reserve Bank of Atlanta, Atlanta, Georgia 30303. Those interested may have their name placed on a subscription list for future studies in the Series. Such requests should include name, street address or post office box number, city, state, and ZIP code and should be sent to the above address.

Sixth District Statistics

Seasonally Adjusted

(All data are indexes, unless indicated otherwise.)

		Latest Month 1976	One Month Ago	Two Months Ago	One Year Ago		Latest Month 1976	One Month Ago	Two Months Ago	One Year Ago
SIXTH DISTRICT										
INCOME AND SPENDING						Unemployment Rate (Percent of Work Force)*** May 7.2 6.8 6.8 8.1 Average Weekly Hours in Mfg. (Hrs.) . . May 40.7 40.4 41.0 39.9				
Manufacturing Income May	138.9	136.8	138.7	117.9		FINANCE AND BANKING				
Farm Cash Receipts Mar.	189.7	213.8	219.5	224.4		Member Bank Loans May 280 279 278 269				
Crops Mar.	292.6	275.4	288.4	391.1		Member Bank Deposits May 241 236 242 218				
Livestock Mar.	171.5	197.3	189.5	177.1		Bank Debits** May 318 327 337 283				
Installment Credit at Banks*/(Mil. \$)						FLORIDA				
New Loans April	713	826	814	592		INCOME				
Repayments Apr.	669	773	713	702		Manufacturing Income May 136.0 133.5 131.9 118.5				
Retail Sales* Apr.	144.6	144.0	141.1	126.1		Farm Cash Receipts Mar. 255.0 218.7 219.5 309.4				
EMPLOYMENT AND PRODUCTION						EMPLOYMENT				
Nonfarm Employment May	106.9	107.4	107.4	105.4		Nonfarm Employment May 109.9 110.3 110.0 110.5				
Manufacturing May	98.4	98.8	98.4	93.2		Manufacturing May 99.0 98.1 97.1 94.8				
Nondurable Goods May	99.8	100.5	100.2	94.2		Nonmanufacturing May 111.7 112.3 112.1 113.0				
Food May	98.6	98.2	97.0	97.2		Construction May 61.5 63.0 65.5 77.8				
Textiles May	96.6	97.5	97.5	88.7		Farm Employment Apr. 73.8 74.4 69.9 70.9				
Apparel May	98.9	99.0	99.1	89.2		Unemployment Rate (Percent of Work Force)*** May 10.9 11.0 11.0 11.2				
Paper May	99.6	99.2	99.1	95.5		Average Weekly Hours in Mfg. (Hrs.) . . May 41.0 40.2 40.1 39.4				
Printing and Publishing May	104.9	104.5	105.2	103.4		FINANCE AND BANKING				
Chemicals May	104.5	104.7	104.1	100.7		Member Bank Loans May 280 281 285 294				
Durable Goods May	96.8	96.6	96.1	92.0		Member Bank Deposits May 254 249 255 248				
Lbr., Woods Prods., Furn. & Fix. May	89.0	89.4	89.3	82.2		Bank Debits** May 344 362 355 317				
Stone, Clay, and Glass May	91.2	91.6	91.2	91.6		GEORGIA				
Primary Metals May	97.5	96.8	94.4	93.7		INCOME				
Fabricated Metals May	96.5	96.3	95.8	95.4		Manufacturing Income May 135.2 129.0 135.9 109.1				
Machinery May	108.4	108.3	108.1	104.9		Farm Cash Receipts Mar. 183.8 210.4 214.4 201.8				
Transportation Equipment May	94.5	93.3	92.4	87.2		EMPLOYMENT				
Nonmanufacturing May	109.6	110.1	110.2	109.3		Nonfarm Employment May 103.0 103.3 103.5 100.7				
Construction May	81.1	83.3	84.8	89.6		Manufacturing May 96.5 96.9 96.7 89.3				
Transportation May	104.4	104.6	104.1	104.0		Nonmanufacturing May 105.6 105.7 106.1 105.2				
Trade May	108.1	108.6	108.7	107.3		Construction May 72.8 74.9 75.7 79.1				
Fin., ins., and real est. May	111.7	113.4	112.1	113.7		Farm Employment Apr. 84.0 106.9 107.7 103.7				
Services May	117.3	117.3	117.6	115.5		Unemployment Rate (Percent of Work Force) May 6.9 6.8 6.9 9.4				
Federal Government May	105.3	106.2	106.3	104.8		Average Weekly Hours in Mfg. (Hrs.) . . May 40.9 39.4 40.9 39.1				
State and Local Government May	118.8	118.7	118.2	116.4		FINANCE AND BANKING				
Farm Employment May	82.8	96.3	95.9	78.5		Member Bank Loans May 249 250 256 252				
Unemployment Rate (Percent of Work Force) May	8.4	8.1	8.1	9.3		Member Bank Deposits May 194 197 200 195				
Insured Unemployment (Percent of Cov. Emp.) May	3.8	3.7	3.9	6.8		Bank Debits** May 405 427 416 347				
Average Weekly Hours in Mfg. (Hrs.) May	40.8	40.0	40.8	39.5		LOUISIANA				
Construction Contracts* Apr.	210	229	181	171		INCOME				
Residential Apr.	180	156	166	130		Manufacturing Income May 141.6 142.6 140.3 125.5				
All Other Apr.	239	302	196	211		Farm Cash Receipts Mar. 158.1 171.7 191.3 238.6				
Cotton Consumption** Apr.	75.4	100.8	76.4	56.2		EMPLOYMENT				
Petroleum Production */** May	88.2	88.5	88.0	93.8		Nonfarm Employment May 106.6 106.9 106.7 105.6				
Manufacturing Production Apr.	150.2	150.4	149.6	140.4		Manufacturing May 101.6 101.7 102.0 100.8				
Nondurable Goods Apr.	150.9	152.2	151.4	142.4		Nonmanufacturing May 107.6 107.9 107.6 106.5				
Food Apr.	133.9	133.7	134.8	134.9		Construction May 107.2 108.4 109.0 106.1				
Textiles Apr.	149.2	152.4	152.7	136.0		Farm Employment Apr. 79.2 92.2 93.0 74.8				
Apparel Apr.	133.8	137.8	136.0	118.2		Unemployment Rate (Percent of Work Force)*** May 7.8 7.9 6.9 7.3				
Paper Apr.	145.1	144.5	143.9	131.4		Average Weekly Hours in Mfg. (Hrs.) . . May 40.7 41.1 41.0 40.5				
Printing and Publishing Apr.	133.1	133.8	133.1	125.8		FINANCE AND BANKING				
Chemicals Apr.	165.0	165.0	163.2	159.6		Member Bank Loans* May 240 237 252 246				
Durable Goods Apr.	149.2	147.4	146.3	137.8		Member Bank Deposits* May 216 213 220 206				
Lumber and Wood Apr.	161.5	158.1	159.4	138.9		Bank Debits*/** May 268 270 285 249				
Furniture and Fixtures Apr.	136.4	137.0	136.3	116.2		ALABAMA				
Stone, Clay, and Glass Apr.	136.5	133.1	136.4	137.4		MISSISSIPPI				
Primary Metals Apr.	101.9	101.6	101.9	100.8		INCOME				
Fabricated Metals Apr.	112.9	112.7	111.9	111.1		Manufacturing Income May 137.8 141.6 140.4 120.5				
Nonelectrical Machinery Apr.	162.2	161.8	158.5	148.8		Farm Cash Receipts Mar. 208.3 239.5 269.2 204.3				
Electrical Machinery Apr.	248.6	241.8	234.6	240.1		EMPLOYMENT				
Transportation Equipment Apr.	145.4	145.4	143.9	122.0		Nonfarm Employment May 109.7 110.4 110.2 106.1				
FINANCE AND BANKING						Manufacturing May 99.5 101.0 100.1 95.7				
Loans*						Nonmanufacturing May 114.3 114.6 114.7 110.7				
All Member Banks May	265	264	271	270		Construction May 123.0 123.0 123.3 116.1				
Large Banks May	218	219	221	227		Farm Employment Apr. 93.9 125.7 125.7 74.6				
Deposits*						Nonfarm Employment May 107.6 107.7 107.7 103.2				
All Member Banks May	230	228	234	222		Manufacturing May 101.8 101.7 100.9 93.4				
Large Banks May	187	193	200	192		Nonmanufacturing May 110.4 110.6 111.0 108.5				
Bank Debits*/** May	332	345	346	297		Construction May 102.2 103.0 105.0 99.4				
ALABAMA						Farm Employment Apr. 62.6 93.8 92.9 58.3				
INCOME						MISSISSIPPI				
Manufacturing Income May	137.8	141.6	140.4	120.5		INCOME				
Farm Cash Receipts Mar.	208.3	239.5	269.2	204.3		Manufacturing Income May 156.1 151.7 155.9 128.0				
EMPLOYMENT						Farm Cash Receipts Mar. 181.7 275.7 293.2 232.7				
Nonfarm Employment May	109.7	110.4	110.2	106.1		EMPLOYMENT				
Manufacturing May	99.5	101.0	100.1	95.7		Nonfarm Employment May 107.6 107.7 107.7 103.2				
Nonmanufacturing May	114.3	114.6	114.7	110.7		Manufacturing May 101.8 101.7 100.9 93.4				
Construction May	123.0	123.0	123.3	116.1		Nonmanufacturing May 110.4 110.6 111.0 108.5				
Farm Employment Apr.	93.9	125.7	125.7	74.6		Construction May 102.2 103.0 105.0 99.4				
FLORIDA						Farm Employment Apr. 62.6 93.8 92.9 58.3				
INCOME						MISSISSIPPI				
Manufacturing Income May	136.0	133.5	131.9	118.5		INCOME				
Farm Cash Receipts Mar.	255.0	218.7	219.5	309.4		Manufacturing Income May 156.1 151.7 155.9 128.0				
EMPLOYMENT						Farm Cash Receipts Mar. 181.7 275.7 293.2 232.7				
Nonfarm Employment May	109.9	110.3	110.0	110.5		EMPLOYMENT				
Manufacturing May	99.0	98.1	97.1	94.8		Nonfarm Employment May 107.6 107.7 107.7 103.2				
Nonmanufacturing May	111.7	112.3	112.1	113.0		Manufacturing May 101.8 101.7 100.9 93.4				
Construction May	61.5	63.0	65.5	77.8		Nonmanufacturing May 110.4 110.6 111.0 108.5				
Farm Employment Apr.	73.8	74.4	69.9	70.9		Construction May 102.2 103.0 105.0 99.4				
Unemployment Rate (Percent of Work Force)*** May 10.9 11.0 11.0 11.2						Farm Employment Apr. 62.6 93.8 92.9 58.3				
Average Weekly Hours in Mfg. (Hrs.) . . May 41.0 40.2 40.1 39.4										
FINANCE AND BANKING										
Member Bank Loans May 280 281 285 294										
Member Bank Deposits May 254 249 255 248										
Bank Debits** May 344 362 355 317										
GEORGIA										
INCOME										
Manufacturing Income May 135.2 129.0 135.9 109.1										
Farm Cash Receipts Mar. 183.8 210.4 214.4 201.8										
EMPLOYMENT										
Nonfarm Employment May 103.0 103.3 103.5 100.7										
Manufacturing May 96.5 96.9 96.7 89.3										
Nonmanufacturing May 105.6 105.7 106.1 105.2										
Construction May 72.8 74.9 75.7 79.1										
Farm Employment Apr. 84.0 106.9 107.7 103.7										
Unemployment Rate (Percent of Work Force) May 6.9 6.8 6.9 9.4										
Average Weekly Hours in Mfg. (Hrs.) . . May 40.9 39.4 40.9 39.1										
FINANCE AND BANKING										
Member Bank Loans May 249 250 256 252										
Member Bank Deposits May 194 197 200 195										
Bank Debits** May 405 427 416 347										
LOUISIANA										
INCOME										
Manufacturing Income May 141.6 142.6 140.3 125.5										
Farm Cash Receipts Mar. 158.1 171.7 191.3 238.6										
EMPLOYMENT										
Nonfarm Employment May 106.6 106.9 106.7 105.6										
Manufacturing May 101.6 101.7 102.0 100.8										
Nonmanufacturing May 107.6 107.9 107.6 106.5										
Construction May 107.2 108.4 109.0 106.1										
Farm Employment Apr. 79.2 92.2 93.0 74.8										
Unemployment Rate (Percent of Work Force)*** May 7.8 7.9 6.9 7.3										
Average Weekly Hours in Mfg. (Hrs.) . . May 40.7 41.1 41.0 40.5										
FINANCE AND BANKING										
Member Bank Loans* May 240 237 252 246										
Member Bank Deposits* May 216 213 220 206										
Bank Debits*/** May 268 270 285 249										
ALABAMA										
MISSISSIPPI										
INCOME										
Manufacturing Income May 137.8 141.6 140.4 120.5										
Farm Cash Receipts Mar. 208.3 239.5 269.2 204.3										
EMPLOYMENT										
Nonfarm Employment May 109.7 110.4 110.2 106.1										
Manufacturing May 99.5 101.0 100.1 95.7										
Nonmanufacturing May 114.3 114.6 114.7 110.7										
Construction May 123.0 123.0 123.3 116.1										
Farm Employment Apr. 93.9 125.7 125.7 74.6										

	Latest Month	One Month Ago	Two Months Ago	One Year Ago		Latest Month	One Month Ago	Two Months Ago	One Year Ago
Unemployment Rate (Percent of Work Force)*** May	5.7	5.1	5.7	7.8	EMPLOYMENT				
Average Weekly Hours in Mfg. (Hrs.) May	40.1	39.5	40.7	39.0	Nonfarm Employment May	104.3	105.4	105.9	102.4
FINANCE AND BANKING					Manufacturing May	96.7	97.4	97.4	91.2
Member Bank Loans* May	266	252	270	262	Nonmanufacturing May	108.2	109.5	110.2	108.2
Member Bank Deposits* May	238	232	240	218	Construction May	78.3	86.6	87.8	94.9
Bank Debits** May	303	301	303	257	Farm Employment Apr.	99.9	97.0	100.2	88.6
TENNESSEE					Unemployment Rate (Percent of Work Force) May	7.9	7.0	6.9	8.8
INCOME					Average Weekly Hours in Mfg. (Hrs.) May	41.0	39.8	41.1	39.6
Manufacturing Income May	137.9	135.2	138.1	117.0	FINANCE AND BANKING				
Farm Cash Receipts Mar.	182.7	251.5	198.6	197.3	Member Bank Loans* May	269	268	280	277
					Member Bank Deposits* May	226	227	236	223
					Bank Debits** May	273	281	299	244

*For Sixth District area only; other totals for entire six states
 ***Seasonally adjusted data supplied by state agencies.
 **Daily average basis †Preliminary data r-Revised N.A. Not available
Note: All indexes: 1967 = 100, except mfg. income, employment, and retail sales, 1972 = 100.
 All employment data has been adjusted to March 1975 benchmarks and reflect new seasonal factors.
 Sources: Manufacturing production estimated by this Bank; nonfarm, mfg. and nonmfg. emp., mfg. income and hours, and unemp., U.S. Dept. of Labor and cooperating state agencies; cotton consumption, U.S. Bureau of Census; construction contracts, F. W. Dodge Div., McGraw-Hill Information Systems Co.; pet. prod., U.S. Bureau of Mines; 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.
 †Data have been bench marked and new trading day factors and seasonal factors computed using December 31, 1974 and June 30, 1975 Report of Condition data as bases.
 *Retail sales index calculated by this Bank, based on sales tax collections reported by individual States.

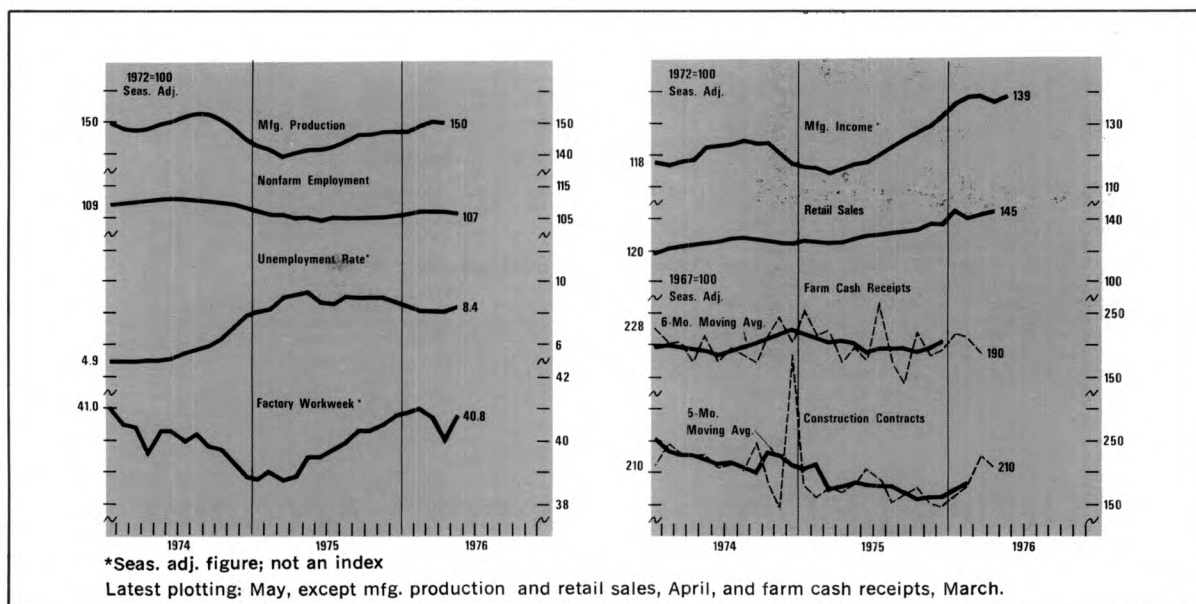
Debits to Demand Deposit Accounts

Insured Commercial Banks in the Sixth District (In Thousands of Dollars)

Percent Change						Percent Change											
			May 1976 from						May 1976 from								
May 1976	April 1976	May 1975	April 1976	May 1975	Year to date 5 mos. 1976 from 1975	May 1976	April 1976	May 1975	April 1976	May 1975	Year to date 5 mos. 1976 from 1975						
STANDARD METROPOLITAN STATISTICAL AREAS ¹						Dothan						227,625	233,694	189,517	- 3	+20	+22
						Selma	105,772	100,239	82,551	+ 6	+28	+20					
Birmingham	5,712,768	5,769,667	4,996,007	- 1	+14	+ 8	Bradenton	197,944	236,439	194,913	-16	+ 2	+ 2				
Gadsden	116,749	132,595	104,785	-12	+11	+17	Monroe County	91,400	112,680	135,308	-19	-32	-23				
Huntsville	430,353	473,811	381,091	- 9	+13	+14	Ocala	210,602	228,879	241,035	- 8	-13	- 0				
Mobile	1,281,138	1,470,824	1,441,446	-13	-11	+ 0	St. Augustine	39,257	57,177	43,860	-31	-10	+ 4				
Montgomery	1,095,083	1,024,407	774,545	+ 7	+41	+40	St. Petersburg	1,028,625	1,187,255	963,338	-13	+ 7	+ 9				
Tuscaloosa	281,667	315,684	292,589	-11	- 4	+ 9	Tampa	2,348,157	2,617,147	2,319,613	-10	+ 1	+11				
Barrow-Lakeland-							Athens	170,947	196,111	172,383	-13	- 1	+14				
Winter Haven	897,504	1,033,445	874,418	-13	+ 3	+11	Brunswick	126,230	138,255	119,997	- 9	+ 5	+ 9				
Daytona Beach	465,318	543,268	458,036	-14	+ 2	+ 3	Dalton	206,803	217,523	177,022	- 5	+17	+23				
Ft. Lauderdale-							Elberton	31,471	37,007	27,909	-15	+13	+28				
Hollywood	2,304,168	2,726,661	1,833,801	-15	+26	+33	Gainesville	180,970	196,369	160,189	- 8	+13	+15				
Ft. Myers	380,788	439,731	432,413	-13	-12	- 2	Griffin	79,902	87,710	75,743	- 9	+ 5	+11				
Gainesville	248,637	280,239	237,820	-11	+ 5	- 3	LaGrange	40,074	47,738	40,337	-16	- 1	+20				
Jacksonville	5,638,669	7,575,084	5,065,479	-26	+11	+26	Newnan	54,176	56,851	44,156	- 5	+23	+14				
Melbourne-							Rome	163,228	200,396	162,152	-19	+ 1	+15				
Titusville-Cocoa	420,796	522,040	435,259	-19	- 3	+ 0	Valdosta	117,989	129,864	116,634	- 9	+ 1	+10				
Miami	7,829,474	8,687,209	7,170,508	-10	+ 9	+12	Abbeville	20,525	19,747	18,530	+ 4	+11	+ 6				
Orlando	1,698,816	1,991,486	1,674,652	-15	+ 1	+20	Bunkie	13,440	17,147	16,730	-22	-20	- 3				
Pensacola	694,240	711,843	530,095	- 2	+31	+36	Hammond	108,090	111,683	116,395	- 3	- 7	- 9				
Sarasota	573,543	693,328	575,659	-17	- 0	0	New Iberia	99,708	101,189	95,444	- 1	+ 4	+11				
Tallahassee	1,094,360	1,084,450	1,229,832	+ 1	-11	+ 2	Plaquemine	25,958	28,672	27,560	- 9	- 6	- 8				
Tampa-St. Pete	4,351,420	4,969,885	4,275,938	-12	+ 2	+ 9	Thibodaux	69,176	62,919	68,508	+10	+ 1	- 2				
W. Palm Beach	1,197,159	1,408,762	1,139,069	-15	+ 5	+ 4	Hattiesburg	168,937	179,388	147,866	- 6	+14	+18				
Albany	193,491	222,868	192,182	-13	+ 1	+ 6	Laurel	93,132	95,622	76,250	- 3	+22	+15				
Atlanta	22,818,830	25,160,866	19,837,989	- 9	+15	+15	Meridian	137,983	150,399	132,624	- 8	+ 4	+11				
Augusta	697,840	729,778	664,264	+ 4	+ 5	+ 1	Natchez	66,849	70,107	53,389	- 5	+25	+17				
Columbus	516,535	575,538	486,237	-10	+ 6	+11	Pascagoula-										
Macon	792,062	865,935	825,017	- 9	- 4	+ 5	Moss Point	170,536	160,875	186,795	+ 6	- 9	+ 4				
Savannah	1,298,548	1,426,676	1,061,418	- 9	+22	+35	Vicksburg	85,553	92,576	75,690	- 8	+13	+21				
Alexandria	340,490	344,630	322,253	- 1	+ 6	+ 9	Yazoo City	42,439	59,646	42,706	-29	- 1	+ 7				
Baton Rouge	1,860,471	1,959,174	1,894,069	- 5	- 2	+ 1	Bristol	201,624	209,362	146,450	- 4	+38	+43				
Lafayette	427,304	456,867	403,071	- 6	+ 6	+12	Johnson City	167,585	188,613	170,130	-11	- 1	+ 7				
Lake Charles	319,247	327,565	296,666	- 3	+ 8	+11	Kingsport	370,279	401,544	313,761	- 8	+18	+25				
New Orleans	5,913,269	5,940,825	5,551,556	- 0	+ 7	-10	DISTRICT TOTAL	99,222,529	109,707,130	90,829,484	-10	+ 9	+13				
Biloxi-Gulfport	376,749	359,032	295,457	+ 5	+28	+20	Alabama	12,430,190	12,984,380	11,185,111	- 4	+11	+11				
Jackson	2,014,927	2,022,692	1,705,840	- 0	+18	+17	Florida	30,223,878	35,490,686	28,493,684	-15	+ 6	+14				
Chattanooga	1,402,389	1,361,536	1,254,622	+ 3	+12	+ 3	Georgia	30,643,948	34,125,538	27,163,576	-10	+13	+16				
Knoxville	1,499,549	1,685,234	1,492,263	-11	+ 0	+ 2	Louisiana	10,662,298	10,858,693	10,165,280	- 2	+ 5	+ 8				
Nashville	4,599,221	5,021,087	4,321,950	- 8	+ 6	+ 7	Mississippi	4,095,681	4,146,967	3,577,287	- 1	+14	+18				
							Tennessee	11,166,534	12,100,866	10,244,546	- 8	+ 9	+ 8				
OTHER CENTERS																	
Annisston	137,163	148,968	122,684	- 8	+12	+14											

¹Conforms to SMSA definitions as of December 31, 1972.
²District portion only.
 r-revised

District Business Conditions



Recovery continues in the region's economy. Incomes increased in both industry and agriculture. Consumer spending rose despite a decline in the rate of growth of consumer credit outstanding. The value of construction contracts and business borrowing also rose. While the factory workweek lengthened, employment fell. Prices of farm products increased.

Manufacturing income rebounded in May to a level nearly 18 percent above the May 1975 mark. Despite the April income decline, automobile registrations rose smartly. Department store sales were buoyed by a late Easter holiday; total retail sales increased fractionally. Growth in bank consumer instalment credit outstanding slowed in most categories; automobile purchased paper and mobile home loans declined.

Agriculture's economic picture grew brighter. Prices received increased. Farm cash receipts through the first four months of the year showed increasing gains from the year-ago period, although sharply lower prices for rice and sugar brought Louisiana's crop receipts to only one-third of 1975's level. Prices of soybeans, cotton, and eggs rose abruptly during early June, foreshadowing further rises in farm income. Grain crop prospects were unusually favorable, but bad weather for cotton caused some farmers to plow up poor stands and to replant with soybeans. Broiler placements continued to run about one-tenth above year-ago levels, as did loans at banks in agricultural areas.

Businesses stepped up their borrowing over the mid-June corporate tax payment date. Borrowing by wholesale and retail trade firms, durable goods manufacturers, construction firms, and the service

industry accounted for most of the increase. By early June, many of the largest District banks had posted a 7 $\frac{1}{4}$ -percent prime rate. Inflows of consumer passbook savings weakened in June, and many large banks have begun issuing more money market CD's in order to obtain funds.

Construction activity increased in May. The value of residential contracts leveled off after a big jump in April. Their May value was more than 30 percent above that of a year ago. Two large contracts for manufacturing plants in Louisiana boosted non-residential contracts to their third highest value ever. Mortgage rates edged upward in May and early June, and inflows at savings and loan associations slowed in early June after a strong May.

Nonfarm employment declined in May, and the unemployment rate increased. Manufacturing employment decreased; job gains in durables industries were more than offset by losses in nondurables. Specifically, gains in transportation equipment and primary and fabricated metals were countered by losses in textiles and apparel. Nonmanufacturing employment also fell, with only state and local governments showing strength. The factory workweek was longer, causing weekly earnings to spring back after decreasing in April.