MONTHLY REVIEW

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FEDERAL RESERVE BANK OF ATLANTA

December 1967

Central Bank Swaps — A Bulwark of International Monetary Cooperation

Actions taken by central banks to minimize the shock to the international financial system in the wake of the recent devaluation of the British pound have forcefully demonstrated the strength and amplitude of world monetary cooperation. Close coordination among central banks has taken various forms, one of which has been the creation of a formal network of reciprocal currency swap arrangements between the Federal Reserve System and major foreign central banks. This swap network emerged when the Federal Reserve Bank of New York (acting first as agent of the United States Treasury in early 1961 and later for the Federal Reserve System in 1962) began operations in the foreign exchange markets in cooperation with other central banks. Their purpose was to defend the value of the dollar and to moderate some of the pressures that had developed in the markets following the revaluation of the German mark and the Dutch guilder.

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The success of the swap network in combating destabilizing forces has gained it an indispensable role in the present world monetary system. Yet because this form of international cooperation has had only a relatively short history, many people are still not very familiar with its framework and operations. Consequently, we shall attempt to outline the nature of the swap network, describe its functioning, illustrate some of its operations, and summarize its major accomplishments.

The Nature of the Swap Network

At present, the Federal Reserve swap network consists of separate swap arrangements with 14 central banks and the Bank for International Settlements (BIS). Each swap arrangement is a bilateral agreement creating a standby facility under which a central bank will exchange on request its own currency for that of a central bank partner up to a maximum amount for a stipulated period. A drawing on a swap facility, which functions as a reciprocal line of credit between two central banks, may often be arranged by a single telephone call, resulting in foreign currency balances within a few hours.

Illustrative Swap Transaction
(In Millions)

Federal Reserve		Bundesbank	
Assets	Liabilities	Assets	Liabilities
Foreign Currency + 400 Marks	Deposit to Bundesbank + 100 Dollars	Foreign Currency + 100 Dollars	Deposit to F. R. S. + 400 Marks

$1 = 4 Marks (DM)

If the German Bundesbank, for instance, were to draw from the Federal Reserve $100 million, the System would credit the deposit account of the Bundesbank with $100 million and would receive in return a credit to its account at the Bundesbank of an equivalent amount of the partner's currency at the current rate of exchange, say DM400 million at four marks to the dollar. (In other words, each party receives a short-term asset denominated in its partner's currency in exchange for a short-term liability in its own currency.)

The foreign central bank may disburse the dollar balances obtained through the swap exchange operations, while the System typically places its foreign currency balances in short-term investments. Under the Federal Reserve Act, the Federal Reserve may invest idle amounts of foreign currencies held on account with a foreign bank in bills of exchange and acceptances arising out of actual commercial transactions and having maturities of not more than 90 days or place them in an interest-bearing time account with the same or some other foreign bank. Under law, the Federal Reserve does not have authorization to invest these amounts in obligations of foreign governments; e.g., foreign Treasury bills. A current bill before Congress proposes to provide a broader choice in selecting suitable instruments for investment.

If the Federal Reserve made a swap drawing instead, its central bank partner would invest its dollar balances created by the transaction in nontransferable U.S. Treasury certificates of indebtedness due on the maturity date of the swap but redeemable in whole or in part on two days' notice. (The BIS and the Swiss National Bank balances accruing through swaps may be invested in U.S. Treasury bills.) In either case, the invested balances bear interest at equal rates agreed upon in advance. Both parties agree to reverse the swap transaction at a specified date (usually three months) at which time all disbursed swap balances must have been replenished. Alternatively, on mutual consent of both partners, the swap credits may be renewed for additional three-month periods up to a maximum of one year. The two partners always reverse the transaction at the original rate of exchange, thus providing an exchange guarantee protecting each party against movements of the market rate of exchange or the risk of devaluation of either currency.

Unlike a swap drawing, the swap arrangement is concluded for a definite period of a year or less and also may be renewed by mutual consent. No swap arrangements have ever terminated without renewal, but most have had their terms lengthened and their original amounts increased. A major expansion occurred on September 13, 1966, when the overall amount of the System's swap network rose from $2.8 billion to $4.5 billion involving increases with every swap partner except the Bank of France. Subsequently, the Federal Reserve has augmented the total further by concluding new agreements with the central banks of Mexico, Denmark, and Norway, and expanding existing arrangements with the Bank for International Settlements and the Swiss National Bank. Following the devaluation of the pound, another major expansion of the network of $1.75 billion brought the total to $6.78 billion.

Although it has periodically added new central bank partners to the network, the System has nevertheless restricted swap arrangements to major convertible currencies; i.e., technically

Swap Arrangements Between the System and Foreign Central Banks

Institution	Date of Original Agreement	Original Amount (Millions of Dollars)	Total Amount Nov. 30, 1967 (Millions of Dollars)
Austrian National Bank	Oct. 25, '62	50	100
National Bank of Belgium	June 20, '62	50	225
Bank of Canada	June 26, '62	250	750
National Bank of Denmark	May 17, '67	100	100
Bank of England	May 31, '62	50	1,500
Bank of France	Mar. 1, '62	50	100
German Federal Bank	Aug. 2, '62	50	750
Bank of Italy	Oct. 18, '62	50	750
Bank of Japan	Oct. 29, '63	150	750
Bank of Mexico	May 17, '67	130	130
Netherlands Bank	June 13, '62	50	225
Bank of Norway	May 17, '67	100	100
Bank of Sweden	Jan. 17, '63	50	200
Swiss National Bank	July 16, '62	100	250
BIS	July 16, '62	100[1]	850[2]

[1]Against Swiss francs.
[2]$250 million available against Swiss francs; $600 million against European currencies other than Swiss francs.

"convertible" in that the government issuing the currency has accepted Article VIII of the *Articles of Agreement* of the IMF. (Although Switzerland does not belong to the IMF, Swiss francs are considered convertible by that institution. However, francs cannot be used for repayments to the IMF because of Swiss nonmembership.) For the United States, convertibility implies that a central bank will redeem in gold or dollars (at its option) or in other convertible currencies balances of its own currency held by the Federal Reserve or U. S. Treasury. Furthermore, convertible currencies, in contrast to nonconvertible currencies, are counted as official reserves and can be used to repay drawings from the IMF. The convertibility of swap currencies assures that a swap drawing has no net effect on the U. S. balance of payments since the addition to official reserves in the form of swap balances exactly offsets the short-term liability incurred to a central bank swap partner.

A few swaps possess special characteristics which separate them from the general pattern. Of the System's 15 swap partners, only the BIS does not function as a central bank for a specific country. Nevertheless, its role as a bank for central banks and its large dealings in foreign exchange and Euro-dollars make it useful in the swap network. Only the BIS has entered into swap arrangements with the System involving more than one foreign currency. Under one swap facility, the Federal Reserve can only draw Swiss francs, while under the other it can draw authorized European currencies other than Swiss francs.

Swap arrangements are usually made on a standby basis so that a partner only draws on a swap facility when it desires to obtain balances of that currency. Only the amounts needed are drawn, and drawings are repaid within a relatively short period. However, in the System's swap arrangement with the National Bank of Belgium, the first $50 million of the swap facility remains fully drawn at all times. Consequently, this portion of the swap is considered activated only when disbursements from the fully drawn balances are actually made.

On an *ad hoc* basis, the System has also engaged in third currency swaps whereby balances of one foreign currency were used to acquire balances of another. Third currency swaps differ from ordinary swaps because the System uses a foreign currency asset instead of dollars to acquire other foreign currency balances and sometimes allows them to remain outstanding for longer periods than the usual swaps. These swaps are not part of the regular swap network.

How the Swap Network Functions

Swaps have been tailored to fit a special need created by the structure of the present world monetary system centered on the IMF. Under the IMF *Articles of Agreement,* all member nations agree to establish their currencies at a fixed, or par, rate with the U. S. dollar of the weight and fineness of gold in effect on July 1, 1944. Furthermore, they are obligated to prevent the market rates for their currencies from fluctuating more than one percent above or below the par rate. They meet this obligation primarily by buying or selling dollars against their respective currencies. In practice, most System swap partners maintain upper and lower limits at approximately .75 percent of par. At times disturbances caused by speculation, seasonal flows of funds between countries, or other circumstances can often place severe upward or downward pressures on the market rate of a currency. Swaps act as a first line of defense against temporary, reversible pressures and provide time for calm, orderly policy decisions to make the necessary corrections.

Thus, a foreign central bank facing a rapid decline in its currency's exchange rate will usually defend the rate by purchasing its own currency in the market with dollars. Its swap facility with the Federal Reserve gives it ready access to dollars. Otherwise, the central bank would have to acquire the dollars through such methods as a sale of gold or a drawing from the IMF which it may deem less suitable for short-run situations. After the temporary disturbances inducing official intervention in the market have moderated or ceased, the central bank will then repurchase dollars in the market or from other official monetary authorities and liquidate the swap. If the forces causing a decline in the exchange rate thereby inducing official support and use of swap prove of longer duration, the central bank still has gained the extra time provided by the swap to make other arrangements for correcting the situation and will then repay the swap.

Because of the special role of the dollar in the present world monetary structure, Federal Reserve swap operations ordinarily differ somewhat from those initiated by other central banks. In contrast to all other IMF members, the United States maintains the value of the dollar by buying and selling gold at a fixed rate of $35 per ounce. When a foreign currency rate rises because of pressures against the dollar, knowing that any undesired dollar accumulations can be exchanged

for U. S. gold at the established rate, a central bank will prevent the rate from exceeding the upper limit by buying dollars with its own currency. The Federal Reserve can avert a U. S. gold loss from temporary pressures against the dollar by making a swap drawing from the foreign central bank concerned and using the foreign currency so obtained to buy back, or absorb, its dollar accumulations. The foreign central bank partner benefits from the swap because it substitutes holdings of swap dollars with an exchange guarantee (through the provision of forward cover) for uncovered dollars subject to the risk of loss through changes in the exchange rate. When the adverse pressures against the dollar slacken, the swap currency's exchange rate generally eases, thereby allowing the System to repurchase sufficient amounts to reconstitute the swap balances and liquidate the swap.

Suppose the forces unfavorable to the dollar last longer than expected. In these situations, the System may purchase the necessary amounts of currency to liquidate the swap from the U. S. Treasury. The Treasury procures the currency through the issuance of a medium-term bond denominated in the required currency (commonly called Roosa bonds) or from a drawing on the IMF, or by selling gold. Thus, the Federal Reserve restricts swap transactions to short-term operations.

Some Uses of the Swap Network

On many occasions, the swap network has helped to mitigate disturbances that could have produced disastrous effects in the international financial markets with widespread repercussions. One very dramatic illustration occurred in November 1963, immediately following the assassination of President Kennedy.

When the news of the events in Dallas began to spread, European markets had already closed for the day. In New York, the Federal Reserve made sizable offers to buy dollars at rates prevailing just prior to the shooting with currencies available under swap arrangements. Simultaneously, the Bank of Canada took similar steps on its own initiative. As the market became aware of the firm stand of the Federal Reserve, speculative pressures receded and the market ended the day on a steady note.

Through contacts with major European central banks, the Federal Reserve made further arrangements for undercutting speculative forces in Europe on the Saturday and Monday following the Friday assassination during which time the New York market remained closed. When the markets recognized the extent of coordinated central bank intervention, speculative fears subsided. Though only moderate intervention in the market was necessary, the prior existence of rapid lines of communication between central banks and the ready availability of financial resources through the swap network certainly proved decisive factors in offsetting adverse reactions to that terrible tragedy.

Swaps have also proved very valuable in constraining disturbing temporary seasonal pressures caused by year-end "window-dressing" operations of certain European commercial banks. These banks, mainly in Germany and Switzerland, often withdraw temporarily short-term investments made abroad so that a high proportion of their liquid assets will be denominated in their domestic currencies at the end of the year. They usually withdraw most of these funds from the Euro-dollar market, an international market in short-term funds denominated primarily in U. S. dollars. In late 1966, for example, by temporarily selling their dollar investments and converting the funds into their own currencies, these banks provoked rapid rises in the exchange rate for German marks and Swiss francs. To moderate the rises in their respective currency rates, the German Bundesbank and the Swiss National Bank bought dollars. The Federal Reserve in return drew on the swap lines with the Bundesbank and Swiss National Bank and used the swap balances to repurchase the dollar accumulations of these two institutions.

Meanwhile, the shortage of funds in the Euro-dollar market caused by these operations and other forces drove up interest rates there and threatened to pull funds out of the United Kingdom. The resulting sale of sterling caused the British pound rate to suffer intense downward pressures and required some support by the Bank of England. As a further conseqence, the Bank of England was prevented from repaying earlier swap drawings. This led the BIS to draw dollars from its swap facility with the System and place them in the Euro-dollar market to ease pressures there. Following these cooperative actions, the foreign exchanges calmed considerably.

This whole process reversed itself in January, when German and Swiss commercial banks began to reinvest in the Euro-dollar market. Then the rates for the Swiss franc and the German mark fell off and the System purchased enough of these currencies to repay its swap drawings from the Bundesbank and the Swiss National

Bank. The increased flow of funds back into sterling and Euro-dollars following the unwinding of window-dressing operations and the return of confidence in sterling enabled the Bank of England and the BIS to recover dollars to repay their swaps to the System.

Other unsettling periods during which the swap network has played an impressive role include the outbreak of the Arab-Israeli War, the Berlin crisis, the Cuban missile confrontation, and the sterling crises of 1964 and 1966, as well as many more routine occasions.

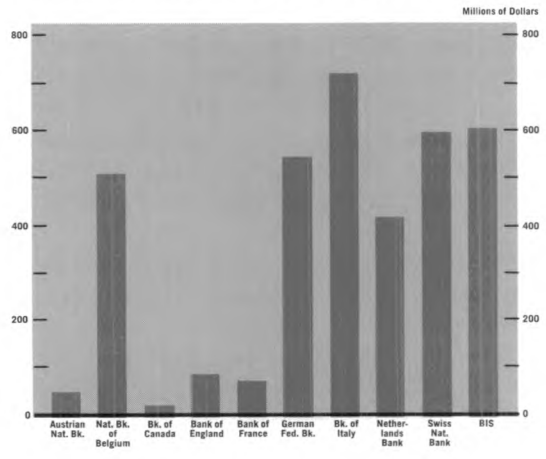
The Contributions of the Swap Network

Despite a relatively short time in existence, the swap network can claim a number of worthy accomplishments. Although constituting no cure for balance-of-payments deficits, the swap network has provided a cushion of foreign credits that has protected the value of the dollar in vulnerable situations. Through August 1967, the System has drawn approximately $3.6 billion from 10 of its swap partners in the dollar's defense.

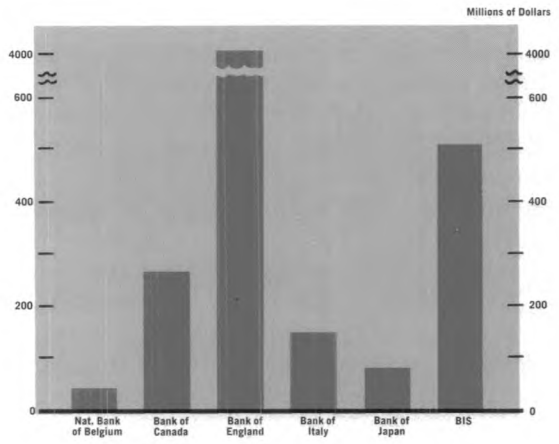
The swap network has similarly redounded to the benefit of foreign currencies. The System has supplied an even greater amount of dollar swap credits to the six swap partners that have made drawings from it. However, the major portion of these drawings have been made by the Bank of England, reflecting the weakness in the balance-of-payments position of the United Kingdom throughout the period.

The drawings of the BIS probably should be distinguished from the others since these drawings were made to channel dollars into the Euro-dollar market to reduce incentives for moving

Through August 31, 1967, the Federal Reserve has drawn a total of $3.6 billion from ten of its swap partners.



Six members of the swap network drew a total of $5.1 billion from the Federal Reserve through June 30, 1967.



funds from the U.S. and Britain into that market. Thus, these drawings benefited the U.S. balance-of-payments to the extent that they reduced U.S. short-term capital outflows.

Swaps have enhanced the flexibility and efficiency of central bank operations by supplementing more traditional methods of obtaining foreign currencies and by providing time for more effective uses of conventional policy tools. Thus, the addition of the swap network has broadened the range of policy choices available to central banks.

The very close coordination between swap network members has inevitably advanced monetary cooperation and fostered better understanding of the problems which the monetary authorities of individual countries face. Accordingly, the swap network has also promoted a better mutual assessment of how the world monetary system functions and may have thereby influenced the outcome of the discussions which recently resulted in the creation of a framework for issuing a new international reserve asset.

Swaps have proved very successful in offsetting disturbing shocks to international financial flows arising from political crises, speculative crises, sharp seasonal movements, and other temporary disturbances. Often the mere existence of the swap network or a minimum show of central bank cooperation working through the network has sufficed to offset cumulative movements of funds that do not accurately reflect underlying economic conditions.

Swaps have supplemented traditional central bank reserves and IMF credits as a source of international liquidity. The additional balances of central bank holdings of convertible currencies

created by swaps constitute real, though temporary, increases in world reserves, thereby allowing central banks to economize on the use of other reserves, especially gold.

Despite the achievements of recent years, the swap network certainly is no panacea for correcting difficulties caused by fundamental balance-of-payments disequilibrium and other chronic maladjustments in international payments. These problems still require discipline, patience, and continued monetary cooperation for their ultimate solution.

JOHN E. LEIMONE

A technical appendix using T-accounts to illustrate the various steps of a Federal Reserve initiated swap transaction and a foreign central bank initiated transaction is available upon request to the Research Department, Federal Reserve Bank of Atlanta, Atlanta, Georgia 30303.

Bank Announcements

The **First Citizens Bank,** Covington, Georgia, a nonmember bank, began to remit at par on November 1 for checks drawn on it when received from the Federal Reserve Bank.

Another nonmember bank, the **Bank of Hartwell,** Hartwell, Georgia, began to remit at par on November 9.

The Per Jacobsson Foundation Lectures

A lecture on "Economic Development—the Banking Aspects" was delivered in Rio de Janeiro on September 22, 1967, by Mr. David Rockefeller, president of the Chase Manhattan Bank. Commentaries were made by Mr. Felipe Herrera, president of the Inter-American Development Bank, and Mr. Shigeo Horie, former chairman of the Board of Directors of The Bank of Tokyo, Ltd.

The proceedings will be published, as heretofore, in English, Spanish, and French for free distribution.

Requests for copies (indicating the language desired) should be addressed to:

THE PER JACOBSSON FOUNDATION
International Monetary Fund Building
Washington, D.C. 20431 U.S.A.

Economies of Scale in Banking by Frederick W. Bell and Neil B. Murphy uses Functional Cost data to measure the relation between costs and output in commercial banking and considers other factors influencing costs such as wage levels and organizational structure. This 33-page free booklet is now available upon request to the Federal Reserve Bank of Boston, 30 Pearl Street, Boston, Massachusetts 02106.

INDEX
For the Year 1967

Sixth District Statistics

Seasonally Adjusted

(All data are indexes, 1957-59 = 100, unless indicated otherwise.)

	Latest Month (1967)		One Month Ago	Two Months Ago	One Year Ago
SIXTH DISTRICT					
INCOME AND SPENDING					
Personal Income (Mil. $, Annual Rate)	Sept.	57,721	58,625r	57,702r	53,408
Manufacturing Payrolls	Oct.	200	201	200	192
Farm Cash Receipts	Oct.	130	129	161	130
Crops	Oct.	103	99	174	100
Livestock	Oct.	147	161	152	153
Instalment Credit at Banks* (Mil. $)					
New Loans	Oct.	312	324r	302	287
Repayments	Oct.	279	268	256	253
Retail Sales	Sept.	175p	164	167	164
PRODUCTION AND EMPLOYMENT					
Nonfarm Employment	Oct.	137	136	136	134
Manufacturing	Oct.	136	136	135	136
Apparel	Oct.	165	165	163	168
Chemicals	Oct.	132	131	131	131
Fabricated Metals	Oct.	151	151	152	150
Food	Oct.	114	113	114	113
Lbr., Wood Prod., Furn. & Fix.	Oct.	103	103	103	108
Paper	Oct.	118	118	118	115
Primary Metals	Oct.	124	126	126	132
Textiles	Oct.	105	105	106	106
Transportation Equipment	Oct.	178	178	181	179
Nonmanufacturing	Oct.	137	137	137	133
Construction	Oct.	124	124	122	128
Farm Employment	Oct.	56	54	62	63
Unemployment Rate (Percent of Work Force)	Oct.	4.0	4.1	4.1	3.6
Insured Unemployment (Percent of Cov. Emp.)	Oct.	2.4	2.4	2.5	1.7
Avg. Weekly Hrs. in Mfg. (Hrs.)	Oct.	41.2	41.4	40.9	41.3
Construction Contracts*	Oct.	179	151	188	176
Residential	Oct.	184	160	179	117
All Other	Oct.	176	144	195	226
Electric Power Production**	Aug.	146	148	145	141
Cotton Consumption**	Oct.	114	108	107	117
Petrol. Prod. in Coastal La. and Miss.**	Oct.	241	274	270	209
FINANCE AND BANKING					
Loans*					
All Member Banks	Oct.	258	257	256	241
Large Banks	Oct.	230	229	226	224
Deposits*					
All Member Banks	Oct.	196	193	194	178
Large Banks	Oct.	176	172	174	163
Bank Debits*/**	Oct.	212	210	210	192
ALABAMA					
INCOME					
Personal Income (Mil. $, Annual Rate)	Sept.	7,452	7,677r	7,565r	7,005
Manufacturing Payrolls	Oct.	175	176	177	173
Farm Cash Receipts	Oct.	94	125	124	95
PRODUCTION AND EMPLOYMENT					
Nonfarm Employment	Oct.	124	125	125	125
Manufacturing	Oct.	121	121	122	125
Nonmanufacturing	Oct.	126	126	126	124
Construction	Oct.	122	121	120	131
Farm Employment	Oct.	54	55	66	58
Unemployment Rate (Percent of Work Force)	Oct.	4.7	4.8	4.6	4.2
Avg. Weekly Hrs. in Mfg. (Hrs.)	Oct.	40.7	40.9	40.4	41.0
FINANCE AND BANKING					
Member Bank Loans	Oct.	240	240	241	223
Member Bank Deposits	Oct.	190	190	190	175
Bank Debits**	Oct.	191	193	199	186
FLORIDA					
INCOME					
Personal Income (Mil. $, Annual Rate)	Sept.	17,276	17,261r	16,875r	15,749
Manufacturing Payrolls	Oct.	124	247	246	233
Farm Cash Receipts	Oct.	165	164	160	168
PRODUCTION AND EMPLOYMENT					
Nonfarm Employment	Oct.	150	151	151	145
Manufacturing	Oct.	158	159	157	154
Nonmanufacturing	Oct.	148	149	150	143
Construction	Oct.	106	108	108	109
Farm Employment	Oct.	82	88	77	84
Unemployment Rate (Percent of Work Force)	Oct.	2.9	2.9	3.0	2.5
Avg. Weekly Hrs. in Mfg. (Hrs.)	Oct.	42.5	42.4	42.0	42.4
FINANCE AND BANKING					
Member Bank Loans	Oct.	270	271	270	246
Member Bank Deposits	Oct	205	200	201	180
Bank Debits**	Oct.	223	222	223	193
GEORGIA					
INCOME					
Personal Income (Mil. $, Annual Rate)	Sept.	11,246	11,344r	11,196r	10,389
Manufacturing Payrolls	Oct.	200	203	201	192
Farm Cash Receipts	Oct.	127	141	158	127
PRODUCTION AND EMPLOYMENT					
Nonfarm Employment	Oct.	135	135	135	133
Manufacturing	Oct.	130	130	130	131
Nonmanufacturing	Oct.	138	138	138	134
Construction	Oct.	129	128	125	126
Farm Employment	Oct.	54	50	62	55
Unemployment Rate (Percent of Work Force)	Oct.	3.6	3.7	3.8	3.5
Avg. Weekly Hrs. in Mfg. (Hrs.)	Oct.	41.0	41.6	40.4	41.1
FINANCE AND BANKING					
Member Bank Loans	Oct.	265	268	265	252
Member Bank Deposits	Oct.	215	213	212	195
Bank Debits**	Oct.	225	217	225	203
LOUISIANA					
INCOME					
Personal Income (Mil. $, Annual Rate)	Sept.	8,593	8,678r	8,603r	7,915
Manufacturing Payrolls	Oct.	185	181	179	173
Farm Cash Receipts	Oct.	149	143	236	154
PRODUCTION AND EMPLOYMENT					
Nonfarm Employment	Oct.	128	127	127	124
Manufacturing	Oct.	121	121	119	116
Nonmanufacturing	Oct.	129	129	128	126
Construction	Oct.	139	132	127	143
Farm Employment	Oct.	60	55	62	70
Unemployment Rate (Percent of Work Force)	Oct.	5.0	5.0	5.1	4.7
Avg. Weekly Hrs. in Mfg. (Hrs.)	Oct.	42.4	42.0	41.8	42.4
FINANCE AND BANKING					
Member Bank Loans*	Oct.	231	231	233	223
Member Bank Deposits*	Oct.	164	163	163	152
Bank Debits*/**	Oct.	176	172	171	169
MISSISSIPPI					
INCOME					
Personal Income (Mil. $, Annual Rate)	Sept.	4,014	4,434r	4,355r	3,731
Manufacturing Payrolls	Oct.	221	216	212	210
Farm Cash Receipts	Oct.	118	85	156	109
PRODUCTION AND EMPLOYMENT					
Nonfarm Employment	Oct.	138	138	137	138
Manufacturing	Oct.	145	144	143	148
Nonmanufacturing	Oct.	136	135	135	134
Construction	Oct.	133	132	131	147
Farm Employment	Oct.	45	38	49	55
Unemployment Rate (Percent of Work Force)	Oct.	5.0	5.3	5.0	5.0
Avg. Weekly Hrs. in Mfg. (Hrs.)	Oct.	41.2	40.8	40.1	41.1
FINANCE AND BANKING					
Member Bank Loans*	Oct.	314	306	310	291
Member Bank Deposits*	Oct.	232	231	231	216
Bank Debits*/**	Oct.	207	215	220	201

TENNESSEE	Latest Month (1967)		One Month Ago	Two Months Ago	One Year Ago
INCOME					
Personal Income (Mil. $, Annual Rate)	Sept.	9,140	9,231r	9,108r	8,619
Manufacturing Payrolls	Oct.	198	197	197	190
Farm Cash Receipts	Oct.	109	107	139	118
PRODUCTION AND EMPLOYMENT					
Nonfarm Employment	Oct.	137	137	136	136
Manufacturing	Oct.	143	142	143	146
Nonmanufacturing	Oct.	133	134	133	131
Construction	Oct.	156	158	157	160
Farm Employment	Oct.	57	58	67	66
Unemployment Rate (Percent of Work Force)	Oct.	4.3	4.2	4.3	3.4
Avg. Weekly Hrs. in Mfg. (Hrs.)	Oct.	40.3	40.7	40.2	40.7
FINANCE AND BANKING					
Member Bank Loans*	Oct.	254	245	239	237
Member Bank Deposits*	Oct.	186	182	181	171
Bank Debits*/**	Oct.	228	232	207	205

*For Sixth District area only. Other totals for entire six states. **Daily average basis. r-Revised. p-Preliminary.
Sources: Personal income estimated by this Bank; nonfarm, mfg. and nonmfg. emp., mfg. payrolls 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 Corp.; 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

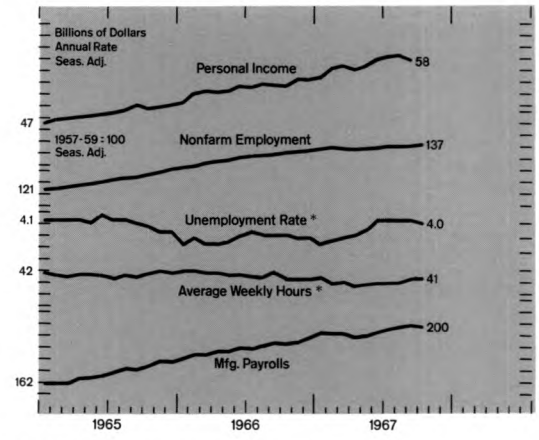
Insured Commercial Banks in the Sixth District

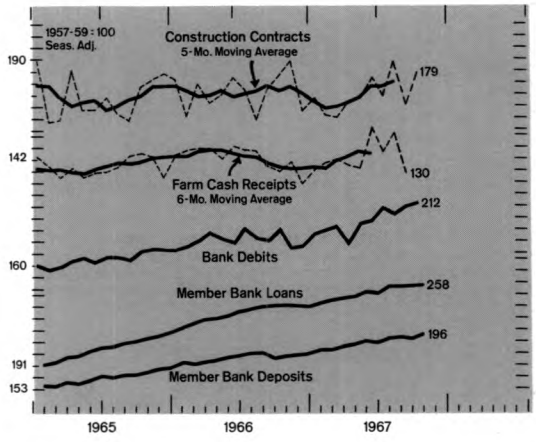
(In Thousands of Dollars)

STANDARD METROPOLITAN STATISTICAL AREAS†	October 1967	September 1967	October 1966	Percent Change October 1967 from Sept. 1967	Percent Change October 1967 from Oct. 1966	Year-to-date 10 mos. 1967 from 1966
Birmingham	1,485,326	1,446,944	1,457,956r	+3	+2	+7
Gadsden	67,319	60,365	66,740r	+12	+1	−5
Huntsville	186,172	170,808	173,798r	+9	+7	+1
Mobile	514,726	455,965	512,703r	+13	+1	+7
Montgomery	311,005	320,040	296,560r	−3	+5	+3
Tuscaloosa	103,942	93,215	90,369	+12	+16	+10
Ft. Lauderdale–Hollywood	657,205	576,551	562,877r	+16	+17	+8
Jacksonville	1,510,856	1,427,445	1,390,800r	+6	+9	+6
Miami	2,350,435	2,200,773	2,076,988	+7	+13	+10
Orlando	561,105	470,560	522,316r	+19	+7	+7
Pensacola	198,064	187,237	178,212r	+6	+11	+9
Tallahassee	137,386	135,612	122,574	+1	+12	+14
Tampa–St. Petersburg	1,418,658	1,292,692	1,241,539r	+10	+14	+11
W. Palm Beach	400,560	370,718	362,233r	+8	+11	+3
Albany	95,389	89,881	89,020	+6	+7	−3
Atlanta	4,959,800	4,599,060	4,188,940r	+8	+18	+9
Augusta	307,844	275,339	277,722r	+12	+11	+10
Columbus	235,784	221,362	202,901r	+7	+16	+10
Macon	259,927	252,432	226,454r	+3	+15	+12
Savannah	267,941	250,426	234,115r	+7	+14	+9
Baton Rouge	564,246	509,271	508,590r	+11	+11	+10
Lafayette	143,987	116,335	116,691	+24	+23	+6
Lake Charles	142,864	143,051	122,956	−0	+16	+12
New Orleans	2,403,779	2,187,869	2,199,135r	+10	+9	+3
Jackson	654,504	611,512	580,880r	+7	+13	+9
Chattanooga	594,557	574,023	543,017r	+4	+9	+6
Knoxville	487,539	451,055	422,187r	+8	+15	+7
Nashville	1,748,701	1,619,786	1,374,790r	+8	+27	+19
OTHER CENTERS						
Anniston	65,874	62,916	62,619	+5	+5	+1
Dothan	65,732	64,830	59,377	+1	+11	+10
Selma	49,170	47,614	45,299	+3	+9	+13
Bartow	33,381	31,687	34,033	+5	−2	−6
Bradenton	73,832	62,059	58,359	+19	+27	+22
Brevard County	223,049	195,169	190,865	+14	+17	+6
Daytona Beach	90,616	81,870	83,484	+11	+9	+7
Ft. Myers–N. Ft. Myers	78,519	71,442	66,190	+10	+19	+9
Gainesville	87,171	86,272r	82,580	+1	+16	+8
Lakeland	119,591	109,980	108,853	+9	+10	+5
Monroe County	31,726	33,988	29,190	−7	+9	+5
Ocala	64,605	52,887	57,484	+22	+12	+5
St. Augustine	20,037	17,777	17,564	+13	+14	+2
St. Petersburg	337,992	291,031r	293,608	+16	+15	+12
Sarasota	111,082	93,204	97,194	+19	+14	+3
Tampa	738,633	705,458r	659,826	+5	+12	+9
Winter Haven	60,385	53,029	48,837	+14	+24	+3
Athens	74,672	70,680	75,768	+6	−1	+4
Brunswick	44,513	41,278	38,595	+8	+15	+6
Dalton	91,823	80,068	80,165	+15	+15	−2
Elberton	15,158	16,166	12,427	−6	+22	+12
Gainesville	78,185	67,507	69,124	+16	+13	+6
Griffin	37,471	35,993	31,778	+4	+18	+7
LaGrange	22,667	22,543	20,828	+1	+9	−3
Newnan	27,796	24,919	25,351	+12	+10	+2
Rome	77,522	69,414	73,087	+12	+6	+1
Valdosta	61,825	61,099	54,096	−4	+14	+16
Abbeville	11,642	12,412	11,894	−6	−2	+2
Alexandria	132,870	124,755	117,102	+7	+13	+13
Bunkie	8,174	5,960	6,412	+37	+27	+20
Hammond	36,432	42,983	35,986	−15	+1	+15
New Iberia	37,519	33,899	33,528	+11	+12	+1
Plaquemine	11,891	10,287	10,696	+16	+11	+11
Thibodaux	21,262	20,680	20,692	+3	+3	+2
Biloxi-Gulfport	102,164	98,216	93,890	+4	+9	+9
Hattiesburg	56,581	51,994	57,039	+9	−1	+1
Laurel	33,740	31,523	35,866	+7	−6	−5
Meridian	66,951	61,553	64,870	+9	+3	+2
Natchez	37,686	34,868	34,610	+8	+9	+7
Pascagoula–Moss Point	55,600	53,668	64,190	+4	−13	+5
Vicksburg	43,946	39,543	41,453	+11	+6	+4
Yazoo City	27,324	25,402	22,612	+8	+21	+5
Bristol	83,624	75,336	70,722	+11	+18	+6
Johnson City	79,133	72,112	68,953	+10	+15	+9
Kingsport	159,003	141,548	139,814	+12	+14	+6
SIXTH DISTRICT, Total	31,199,743	28,712,696	27,818,418r	+8	+16	+8
Alabama‡	4,065,800	3,869,491	3,782,293r	+5	+7	+7
Florida‡	9,260,031	8,519,704	8,299,538	+9	+12	+9
Georgia‡	8,058,421	7,251,038	6,957,949r	+11	+16	+8
Louisiana*†	4,094,865	3,756,983	3,762,838r	+9	+9	+4
Mississippi*†	1,423,863	1,336,346	1,320,195r	+7	+8	+8
Tennessee*†	4,296,763	3,979,134	3,695,605r	+8	+16	+12

*Includes only banks in the Sixth District portion of the state. †Partially estimated. ‡Estimated. r-Revised.

District Business Conditions





*Seas. adj. figure; not an index.

The District's economy continued to tug at the remaining restraints to vigorous expansion. Unemployment showed a small decrease because of a minor contraction in the work force. Retarded by the spreading effects of prolonged strikes, nonfarm employment dropped slightly, however. Personal income did not improve, and consumers continued to restrict their credit financed spending. Construction contracting bounced back strongly in October in all categories. Subdued business lending encouraged banks to continue acquiring securities. Further price strengthening in the crop sector may still pull District farm incomes above 1966 levels.

Nonfarm employment was adversely affected by national strikes and a less-than-seasonal rise in trade jobs in October. Manufacturing employment held even with September levels as a result of good gains in the chemical and food industries. Construction employment also rose further. Average weekly hours remained steady, but a dip in average hourly earnings shaded the growth in manufacturing payrolls.

Large commercial bank lending to business firms remained quiet in November. Most of the larger banks, however, raised their rates on prime business loans from 5½ percent to 6 percent after the November 20 rise in the Federal Reserve discount rate. Other types of loans expanded only modestly, and investment portfolios showed further gains. Lending activity was more vigorous at smaller banks than at larger banks. Both demand and time deposits continue to contribute to a fairly rapid expansion in total deposits.

New instalment loans at banks declined in October, while repayments rose. Consequently, the increase in outstandings was less rapid than in most recent months. Automobile loan extensions were up slightly, while other consumer loans and personal loans dropped. Slower growth in consumer credit paralleled a slight decline in retail sales. Personal income also retreated in September and October from its earlier levels.

Through October, the farm price index was well below a year earlier, but further strength in the crop sector may pull incomes above 1966 levels. Cotton prices advanced sharply in November, reflecting very small crops and reduced inventories of high quality cotton. Additional support will come from above average production of corn, soybeans, and sugarcane.

Contracting for construction projects was vigorous, producing an all-time October high in total, residential, and nonresidential projects. Dollar volume of total projects through the first ten months was only a shade below the comparable 1966 period and over 5 percent above that of 1965. Residential contracts, more heavily weighted in multi-units, were up more than 7 percent over the first ten months of 1966.

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