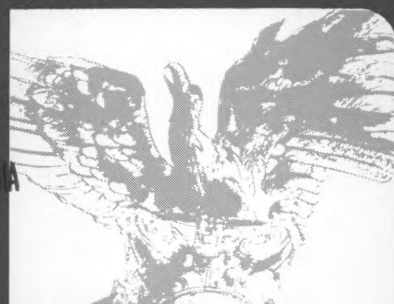


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ECONOMIC REVIEW

Federal Reserve Bank
of Atlanta

September/October 1978



**Changes in
Industry Shares of
National Output**

**Bank Loans Surge in
First Half of 1978**

**District Bank
Earnings Rebound**

New Directions

**Working Paper
Abstract**

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CHANGES IN INDUSTRY SHARES OF NATIONAL OUTPUT

by Charles J. Haulk

The composition of national output—that is, the shares of income originating in various industries—has important implications for overall labor productivity and real economic growth. Within the last 73 years, there have been some significant changes in the make-up of U. S. output, partly secular and partly cyclical. These shifts have been dictated by alterations of the mix of goods and services demanded by consumers and by the government. The following analysis of specific changes in the composition of demand and output and their relationship to productivity and income growth should broaden our understanding of the past, present, and prospective path of U. S. economic growth.

History. The most obvious changes in national output mix that have occurred since 1904 have been the dramatic decline in agriculture's share and the rise in government's share. Other, less-pronounced shifts have been increases in the manufacturing and service shares and decreases in the shares of the group which includes transportation, communication, and utilities and the group consisting of finance, insurance, and real estate. The wholesale and retail trade share has remained almost unchanged over the years, while the combined share of mining and contract construction has fallen slightly.

The Commerce Department's official national income statistics allow us to track changes in industry shares since 1929 in greater detail. Agriculture continued its decline but not until after World War II. From 1945-49 to 1965-69, agriculture's average share fell from 9.2 percent of national income to 3.3 percent, a 60-percent drop in just 20 years. The share of income originating in mining and

construction stood at 6.4 percent in 1975-77, down only slightly from 6.9 percent in 1929.

Manufacturing provided 26.1 percent of national income in the three years 1975-77, compared to 25.4 percent in 1929. However, the story of manufacturing is more interesting than the slight change would suggest. After falling sharply to average 20.8 percent in the years 1930-34, the manufacturing share began to climb, recovering its 1929 share in the late 1930s, and grew rapidly during World War II. After the War, the manufacturing share slipped for two years and then began an uptrend that continued through the mid-Fifties, bringing the sector's share to a high of 32 percent. For the next 15 years, the share of manufacturing was fairly stable, fluctuating only slightly around 30 percent. Then, in the early Seventies, the share dropped suddenly to 26.5 percent and, since 1975, has averaged 26.1 percent. The manufacturing sector, more than any other, has followed the swings in the business cycle. (Kuznets made the same observation in his study of industry shares in the period 1919-38.)¹ Largely because of inventory adjustment problems, manufacturing has had a greater sensitivity to and a greater impact on total income variations than any other sector.

The wholesale and retail trade share rose in the late 1930s and in the years just after World War II but, for the most part, accounts for a consistent 15.0 to 16.0 percent of national income. Services'² share has exhibited a long-run upward

¹ Simon Kuznets, *National Income: A Summary of Findings*, National Bureau of Economic Research, 1946, New York, pp. 39-49.

² Services include such things as health, legal, and personal services, as well as amusement, automotive repair, hotels, etc.

TABLE 1
SHARES OF NATIONAL INCOME, 1904-77*

	(percent)							
	Agriculture	Mining, Contract Construction	Manufacturing	Transportation, Communication, and Utilities	Trade	Services	Finance, Insurance, and Real Estate	Government
1904-13**	17.0	7.8	18.9	11.0	15.0	8.9	16.2	5.4
1914-23	15.2	6.3	22.2	11.0	14.0	8.3	15.0	7.9
1919-28	12.2	7.0	22.2	11.3	13.7	9.4	15.7	8.6
1929***	9.9	6.9	25.4	10.9	15.7	10.1	15.2	5.9
1930-34	8.5	4.8	20.8	11.9	15.8	12.0	15.0	10.8
1935-39	9.6	5.3	24.4	10.2	17.0	10.3	11.3	11.4
1940-44	8.4	5.4	31.9	9.0	15.5	7.9	8.5	13.4
1945-49	9.2	6.0	29.2	8.4	17.8	8.8	8.5	12.2
1950-54	6.7	7.2	31.9	8.5	16.1	8.8	9.6	11.2
1955-59	4.6	7.0	31.3	8.4	15.7	10.0	11.0	12.0
1960-64	4.0	6.5	29.8	8.4	15.4	11.2	11.6	13.3
1965-69	3.3	6.4	29.9	7.9	15.0	12.0	11.3	14.3
1970-74	3.5	6.6	26.5	7.8	15.3	12.8	11.5	15.9
1975-77	3.1	6.4	26.1	7.8	15.7	13.6	11.6	15.4

*1904-28 — 10-year averages.
1929-74 — 5-year averages.

**Estimates by R. F. Martin, *National Income in the U.S., 1909-1938*, National Industrial Conference Board, 1939.

***1929-77, U. S. Department of Commerce.

trend and seems to increase most rapidly during economic slowdowns. The finance, insurance, and real estate group declined sharply and has only partially recovered. Starting at 15.2 percent in 1929, this share held steady through most of the Thirties and then dropped abruptly to 8.5 percent in the late Thirties and early Forties. The share was fairly constant during the late Forties, rose to 11 percent in the mid-Fifties, and has retained that level since.

The share of government increased dramatically in the Thirties and early Forties due to the Depression and War, reaching 13.4 percent in the 1940-44 period. It declined through 1954 but then grew steadily to 16 percent until 1970. In 1977, it fell below 15 percent for the first time since 1968. Transfer payments³ are not included in government's share.

Why the Changes in Industry Shares?

In the short run, industry share changes can result from supply variations and special economic conditions which lead to rapid or slow growth in a particular sector. A protracted strike in the auto

industry, for example, could cause the manufacturing sector's share of national income to drop temporarily. Stockpiling of coal in anticipation of higher prices or shortages could cause a temporary run-up in the mining share. Speculative commercial or residential construction can lead to a momentary increase in the share of construction and real estate.

However, over the longer run, the composition of the sources of national output is primarily dictated by the composition of final demand for the nation's output. To some degree, the quantities and kinds of resources available and technology impact the relative sizes of industry shares. International trade possibilities can, to some degree, offset national resource constraints and alter the distribution of demand.

Since domestic consumption accounts for the largest portion of total output and reflects long-run changes in tastes and incomes which, in turn, determine the composition of output, changes in these consumption patterns are the principal determinants of the shifts in the various industry shares. Changes in government expenditures indirectly

³ Transfer payments are merely a redistribution of income through programs like aid to families with dependent children, Social Security, veterans' benefits, etc.

TABLE 2
PERCENTAGE SHARES OF CONSUMPTION EXPENDITURES

	<u>1950</u>	<u>1955</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
Durable Goods	16.0	15.2	13.3	14.6	13.7	13.6	14.5	14.8
Nondurable Goods	51.1	48.4	46.5	43.8	42.8	41.7	40.5	39.7
Services	32.8	36.3	40.2	41.5	43.5	44.7	45.0	45.5
Food, includes								
eating out	22.7	25.4	24.2	22.5	21.6	21.1	20.2	19.9
Clothing	10.2	9.2	8.1	7.8	7.5	7.2	7.0	6.8
Housing	11.3	13.5	14.8	15.2	15.2	15.4	15.3	15.3
Household Operation	15.2	14.5	14.2	14.3	14.2	14.6	14.6	14.7
Medical Care	4.7	5.2	6.2	7.0	8.1	8.9	9.7	9.8
Personal Business	3.4	3.8	4.4	4.6	4.7	5.2	5.1	5.0
Transportation	13.2	13.6	13.0	13.5	12.6	13.0	13.7	14.3
Recreation	5.8	5.5	5.5	6.0	6.6	6.8	6.6	6.7
Private Education	0.9	1.0	1.2	1.3	1.6	1.5	1.5	1.6
Religion and Welfare	1.2	1.3	1.5	1.4	1.4	1.2	1.3	1.3
Foreign Travel and Other	0.3	0.6	0.7	0.7	0.8	0.5	0.4	0.4

Source: U. S. Department of Commerce.

reflect changes in the consumption preferences of the electorate.

Since 1929, there have been several noteworthy changes in consumer expenditure patterns. Although the proportion spent on goods was nearly the same in 1977 (54.5 percent) as in 1929 (55.5 percent), durable goods claimed a larger share; and nondurables, a smaller portion. Throughout the Depression and the years following the War, nondurables took an increasing share of consumer outlays while durables declined in importance. But then, durable consumption climbed sharply between 1945 and 1950 and then leveled off at the roughly 15-percent share they've held since, fluctuating downward in recessions (see Table 2).

Nondurables' stake in personal outlays has fallen steeply since 1950. Food and apparel, in particular, have consumed dwindling shares of consumer budgets. Increased importation of textiles and apparel has further dampened demand for domestic production of these goods, reducing their importance to national output. Surprisingly, the shares of both consumer spending and total production accounted for by petroleum and coal

products were slightly lower last year than in 1950, even though consumption of petroleum products has been at historically high levels ever since the oil embargo and quadrupling of prices.

The share of consumer outlays marked for services has regained its 1929 level only in the past couple of years. The rise in the goods' share prior to 1950 came at the expense of services, whose claim dropped nearly 13 percentage points. Since then, strong increases in the portion of family budgets spent for education and health care and moderate rises in the personal business and recreation components⁴ have contributed to the rebound of services' share. Outlays for housing gained share until 1965 and held virtually constant as a percentage of consumption through 1977. The phenomenon of service expenditures rising relative to spending for nondurable goods has continued unabated if not stronger than ever in the past five years, in contrast to declines in earlier periods of similarly slow real income growth.

⁴ See "Service Please," *Across the Board*, The Conference Board, August 1978, pp. 42-45.

Will consumer expenditures continue to shift toward services at the expense of nondurables or perhaps even durable goods? In the case of nondurables, the answer is likely to be "yes." The demand for food grows with population rather than income—that means budget allocations for food will continue to decline in importance as population growth slows. On the other hand, depending on OPEC actions and energy legislation, fuel prices could escalate fast enough to preclude a drop in the share of consumption expenditures allotted for energy. Unless expenditures shift from nondurables into durable goods, the contributions of the manufacturing and agricultural sectors to output growth should continue to decline.

Economic Impact of Industry Share Changes. Industry share changes have important implications for future economic growth prospects. The principal impact is on labor productivity—if an industry which has strong productivity potential loses part of its share of national income to an industry with little or no productivity growth, the result will be slower overall growth in output per worker. This is in essence what has happened to the U.S. economy since 1950. Two major productivity-enhancing sectors—manufacturing and agriculture—have lost relative output shares to services and government.

For instance, from 1972 to 1977, real output per worker rose only 2.25 percent, less than 0.5 percent per year. At the same time, the manufacturing sector's average share of national output was the lowest of any five-year period since the Great Depression. The results of a statistical analysis (multiple regression) support the notion that declining manufacturing and agriculture shares, combined with rising service and government shares, have led to slower growth in both productivity and real output.

Outlook. If, as we suspect it might, the growth in demand for services continues as it has in recent years, we can expect the national income shares of nondurable manufacturing and agriculture to continue their slide. Unless durable goods sales accelerate relative to total consumer spending, the overall manufacturing component of national output will deteriorate further.

Further reductions in the shares of these goods-producing sectors will not be beneficial to the economy. Continued slow productivity increases will mean continued small real income gains. However, as income growth slows, the rate at which service expenditures replace nondurables in consumer spending might also subside and moderate the decline in the goods-producing share. ■

AN EMPIRICAL TEST OF THE LINKED OLIGOPOLY THEORY: AN ANALYSIS OF FLORIDA HOLDING COMPANIES

by David D. Whitehead

This article summarizes a staff analysis that may interest those in the economics and banking professions as well as others. It is more technical than the typical Economic Review article. The analysis and conclusions are those of the author. Studies of this kind do not necessarily reflect the views of the Federal Reserve Bank. The complete study is available as part of a series of Federal Reserve Bank of Atlanta Working Papers. Single copies of this and other studies are available upon request to the Research Department, Federal Reserve Bank of Atlanta, Atlanta, Georgia 30303.

The structure of the banking industry has changed significantly during the last ten years, largely because of the acceleration

of multibank holding company formation and acquisition activity since the late 1960s. Most of the acquisitions have been

Continued on page 108

BANK LOANS SURGE IN FIRST HALF OF 1978

by *Stuart G. Hoffman*

During the first half of 1978, credit (loans and investments) at U. S. commercial banks grew rapidly. As shown in Table 1, bank credit was up \$51.4 billion from the beginning of the year through the end of June, an 11.7-percent increase at an annual rate. Although this gain surpassed the huge dollar advances in the first halves of 1973 and 1974, it represented a slower rate of growth than the 15- to 16-percent annual rate of those two earlier years.

The first semester's increase in bank credit can be traced primarily to a surge in bank loans, whereas last year, bank purchases of securities, particularly U. S. Government obligations, contributed a large part of the first-half advance. Bank purchases of U. S. Government securities through June 1978 decelerated for the third consecutive year following a record \$23½-billion rise in the first half of 1975, near the trough of the last recession.

The increased loan demand was broadly based, but much of the acceleration

came from a surge in loans to business borrowers. Business loans were up by \$18.4 billion, or at an 18-percent annual rate, in the first half of 1978, nearly twice the increase of the same period last year.¹ Adjusted to exclude bankers acceptances, which declined by \$3.0 billion through June, bank loan growth in the first half of 1978 approached the rapid rate of the same period in 1974 but was still well below the record pace set in the first half of 1973. Net extensions of real estate and consumer instalment loans through June 1978 equaled \$15.0 and \$10.2 billion, respectively, somewhat more than in the comparable period last year.²

Loans Surge at Large Banks. An analysis of the first half 1978 business loan surge

¹ Toward the end of 1978's first half, total bank loan growth moderated as business loan growth slowed to a 6-percent annual rate in June; data for July and August indicate a return to rapid loan growth, led by a pickup in business loans.

² Data for July and August indicated continued rapid growth in real estate and consumer instalment loans.

TABLE 1
INCREASES IN BANK CREDIT IN THE FIRST HALVES OF SELECTED YEARS

(billion \$, seasonally adjusted;
annual rates of growth, seasonally adjusted)

<u>All Commercial Banks</u>	<u>1973</u>		<u>1974</u>		<u>1975</u>		<u>1976</u>		<u>1977</u>		<u>1978</u>	
Bank Credit	\$46.5	16.1%	\$47.7	15.0%	\$17.8	5.1%	\$27.7	7.6%	\$45.6	11.5%	\$51.4	11.7%
Total Loans	43.4	22.8	37.8	16.7	-8.4	-3.3	12.4	5.0	33.2	12.2	43.8	14.1
Business Loans	19.0	28.9	19.1	24.1	-6.1	-6.6	-4.8	-5.3	10.5	11.5	18.4	18.0
Real Estate Loans	10.2	20.8	8.1	13.8	1.4	2.2	6.8	10.1	12.1	16.2	15.0	17.0
Consumer Loans	5.7	16.2	2.0	4.9	-2.9	-6.7	2.3	5.1	7.1	14.0	10.2	17.3
Investments	3.1	3.5	9.9	10.8	26.2	27.7	15.3	13.6	12.4	10.1	7.6	6.0
Treasury Securities	-0.3	-1.0	3.6	13.6	23.6	96.7	15.3	38.5	7.8	16.0	2.8	5.9
"Other" Securities	3.4	5.8	6.3	9.7	2.6	3.7	0.0	0.0	4.6	6.2	4.8	6.1

Source: Federal Reserve Board.

TABLE 2
CHANGES IN LARGE BANK BUSINESS LOANS IN THE FIRST HALVES OF SELECTED YEARS
(billion \$, not seasonally adjusted)

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
By Location ¹	15.2	14.1	-10.0	-4.7	5.9	12.2
New York City	4.1	5.5	-4.0	-2.6	1.1	2.1
Outside New York City	11.1	8.6	-6.0	-2.1	4.8	10.1
By Industry ²	15.0	14.8	-9.4	-6.5	2.7	9.2
Durable Manufacturing	3.2	4.1	-2.8	-1.6	1.3	2.1
Nondurable Manufacturing	2.0	2.2	-2.1	-0.2	0.6	1.9
Trade	1.7	1.8	-2.3	0.7	1.0	2.6
Public Utilities	1.4	1.8	-1.4	-1.1	-0.2	0.0
Bankers Acceptances	-0.2	0.7	0.6	-1.8	-3.2	-3.0
Other Classifications ³	5.3	3.2	-0.9	-1.6	1.0	3.4
Unclassified	1.6	1.0	-0.5	-0.9	2.2	2.2

¹ Excluding bankers acceptances and adjusted for loans sold to affiliates.

² Including bankers acceptances and adjusted for loans sold to affiliates.

³ Includes mining, construction, services, and foreign loans.

Source: Federal Reserve Board.

(net of acceptances) by class of bank (see Table 2) reveals that large weekly reporting banks accounted for over \$12 billion, or nearly three-fifths, of the total increase.³ That's double the rise during the same period last year and a marked difference from 1975 and 1976, when large banks' business loans fell substantially during the first half of each year. A part of the recent strength in business loans at large banks can be attributed, in turn, to growing demand at the large New York City banks. After declining during the first halves of 1975 and 1976 and rising only \$1.1 billion during that period last year, business loans (net of acceptances) at these banks climbed more than \$2.0 billion in the first six months of 1978.

Although a notable improvement, the advance was much less than the gains from even smaller amounts outstanding experienced in 1973 and 1974. One of several important differences between then and now is the spread between the

bank prime interest rate and the 90-day commercial paper rate, an important consideration for many of the large New York City banks' prime business borrowers. In the first half of 1973, the bank prime interest rate averaged about a ¼ percentage point *below* the commercial paper rate, making bank loans relatively attractive. The prime rate averaged a ½ percentage point *above* the commercial paper rate in the first half of 1974, but the gap was nearly closed by the end of June. In contrast, the bank prime rate exceeded the commercial paper rate by nearly 1¼ percentage points in each of the first six months of 1978, steering many potential customers of large New York City banks into the commercial paper market. The amount of commercial paper outstanding rose by nearly \$9.5 billion, or at a 29-percent annual rate, in the first half of this year.

At the same time that large New York City banks were finally feeling increasing loan demands, large banks outside the City experienced an even stronger growth in borrowings, posting a near record \$10-billion increase in business loans (net of acceptances). That's over twice

³ Large banks financed a sizable part of the rapid first-half advance in business loans by issuing nearly \$9½ billion (net) in large negotiable certificates of deposit. As large banks' business loans flattened in June and July, the growth of negotiable CDs dropped off sharply.

the \$4.8-billion gain in the comparable months last year and compares very favorably with declines in 1975 and 1976 but is still shy of the \$11-billion advance from an even smaller amount outstanding in 1973.

The strength of large banks' commercial and industrial loans through June 1978 was fairly broadly based among different categories of business borrowers. As shown in Table 2, trade loans to retailers and wholesalers continued to show the most rapid growth. Loans to durable and non-durable goods manufacturers rose by \$2.1 and \$1.9 billion, respectively, much more than in the same period last year and in contrast to sizable declines in 1975 and 1976. However, neither advance matched the robust dollar gains of the first halves of 1973 and 1974. Loans to public utilities were unchanged, on net, through June 1978, after declining during that period in each of the past three years. Within the "other" category, mining loans and loans to companies providing various types of services were quite strong in the first six months of this year. Finally, large banks, mainly those in New York City, continued to run off sizable amounts of bankers acceptances, as was the case in the first halves of 1976 and 1977.

Interest Rates Rise. To accommodate the rapid growth in loan demand that accompanied the strong first-half advance in nominal economic activity, banks were willing to supply greater volumes of funds but only at progressively higher interest rates. As the year began, the commercial bank prime interest rate stood at $7\frac{3}{4}$ percent; it gradually rose to $9\frac{1}{2}$ percent by mid-September. Most of this run-up occurred in the second quarter, the period of heaviest demand for loans.

Opinion surveys at selected large banks suggest that more stringent nonprice lending practices accompanied the increase in bank loan rates. Senior loan officers confirm that policies were moderately firmer in the following areas: standards of credit worthiness required to qualify for loans at a given spread above prime, reviews of loan applications for new and nonlocal customers, and requirements for compensating balances on business loans. The survey also suggests that large banks were somewhat less willing to make business loans with more than five years to maturity.

As the volume of bank loans expanded rapidly in the first half of 1978, the nation's money supply (M_1) grew at a $7\frac{3}{4}$ -percent annual rate, nearly the same rate as in the previous six months. The continued brisk rise in M_1 and the accelerated pace of bank lending, particularly to business borrowers, were supported by a $9\frac{3}{4}$ -percent annual rate of increase in the monetary base.

Summary. During the first half of 1978, bank credit rose sharply as strong growth in nominal economic activity boosted loan demand. Business loans, particularly at large commercial banks, along with real estate and consumer instalment loans, surged during this period. Even the large New York City banks experienced a pickup in business loans (net of acceptances). The increased demand for bank loans triggered several upward adjustments in the interest rates banks charge and firmer nonprice lending terms. Commercial banks greatly scaled down their purchases of U.S. Government securities but continued to acquire moderate amounts of municipal securities. ■

SIXTH DISTRICT BANKING NOTES

DISTRICT BANK EARNINGS REBOUND

District member bank earnings, collectively in the doldrums since 1974, rebounded smartly during 1977.* Profitability, as measured by income after taxes but before security transactions as a percentage of equity capital, advanced to 8.9 percent in 1977 from 6.8 percent in 1976 (see Table 1). Last year's rebound allowed banks to recover nearly one-half the ground they lost when earnings dropped from an average of roughly 12 percent during the peak earnings years of 1972 and 1973.

TABLE 1
PROFITABILITY

(income after taxes and before securities gains or losses as a percentage of equity capital, including all reserves)

	1975	1976	1977
Alabama	9.5	10.9	11.3
Florida	3.7	3.4	6.4
Georgia	6.2	8.2	10.5
Louisiana*	11.6	11.3	12.0
Mississippi*	8.7	10.2	11.0
Tennessee*	8.3	10.5	10.7
All District Banks	6.3	6.8	8.9

*Sixth District portion only.

Wide Variations. District bank earnings continue to vary considerably by bank size and by state. The smallest member banks, for example, had average earnings equal to only 2.5 percent of equity capital in 1977. Even this meager return marked a significant gain from the previous year's weak performance, when earnings averaged a dismal 0.05 percent. However, there remained a large number of small unprofitable banks. Of the 48 banks with deposits of less than \$10 million, less than two-thirds operated profitably last year. In 1976, however, only one-half of the small banks (then numbering 87) were profitable. Despite this improvement, the small banks' 1977 earnings rate was only 28 percent of the average for all District banks, compared to 60 percent during

the early 1970s. These banks have not recovered as much as the intermediate and larger banks.

As a group, banks with over \$50 million in assets generated the highest earnings of all District banks. They realized a 10.3-percent rate of return, up from 8.3 percent in 1976. The larger banks were able to achieve better results because of lower operating expenses rather than higher operating income, however. These banks average less income per dollar of assets and lower average rates of return on loans and securities than the smaller District banks. But the medium and large banks can spread some relatively large and fixed expenses, like salaries, occupancy expenses, and various "other" operating costs, over a larger asset base, reducing their operating expenses per dollar of assets.

Banks in the Sixth District portion of Louisiana continued to report the highest earnings—12 percent. However, member banks in Alabama and Mississippi generated earnings of 11 percent or more. Florida banks lag the rest of the District by a considerable margin despite an improvement in 1977. Much of their advance may have been technical, however, since a number of the smaller and least profitable banks were merged into larger banks during the year. The mergers also explain the drop in the number of member banks in Florida, from 331 at the end of 1976 to 286 a year later.

Sources of Higher Earnings. Last year's advance in District bank earnings resulted from both higher income and lower expenses, measured as percentages of total assets. Contributing most to the income growth was interest from loans. Loan income rose as total loans increased from 51.3 percent of total assets in 1976 to 53.7 percent in 1977. The largest lending gains occurred in real estate loans and loans to finance personal consumption expenditures. The average rate of return on loans moved up from 9.36 percent to 9.45 percent.

Interest income from securities was a much less important source of income last year. With loan demand strong, District banks increased their lending more than their acquisitions of securities. The slower growth in investments, especially municipal obligations and U. S. Treasury

*Information is based upon "1977 Operating Ratios, Sixth District Member Banks," available upon request.

securities, and generally lower returns on these assets reduced the relative importance of this income source.

Overall, banks' expenses rose less rapidly than income. During 1977, total operating expenses averaged 89.3 percent of total operating income, down from 91.9 percent in the previous year. Smaller provisions for loan losses accounted for the largest portion of the decrease and marked the second annual decline in these costs. While the largest expense item—interest expenses for deposits—dropped slightly, District banks paid more for borrowed funds. Higher borrowing costs were most noticeable at banks with over \$500 million in assets. These expenses typically rise as the larger banks borrow to meet stronger loan demands. The second large expense category—wages and salaries—dipped after consuming an increasing portion of operating income in previous years.

A Long Way to Go. Despite last year's improvements, District bank earnings are still considerably below their 1973 peak (see Table 2). Since 1973, banks as well as businesses have felt the impact of higher and changing interest rates, inflation, and economic and financial problems lingering from the recession. A comparison of District banks' 1973 performance with their 1977 records reveals the specific changes that these conditions have induced. For example, total operating income increased from 6.9 percent of total assets in 1973 to 7.6 percent in 1977, but total operating expenses rose more rapidly (from 5.6 percent to 6.8 percent) and, therefore, reduced earnings.

Bank operating income has clearly been boosted by higher returns on loans and securities (together, this interest income comprised slightly more than 90 percent of total operating income in 1977) and by a shift of assets into loans and securities. But higher interest rates are a two-edged sword for banks, since their single largest expense is for interest on deposits and borrowed funds. Such interest expenses advanced from 2.62 percent of total assets in 1973 to 3.11 percent in 1977. As a result, three-quarters of the rise in interest income was offset by larger interest expenses. Even so, if higher interest rates had been the only factor impacting bank

TABLE 2

**PERFORMANCE: 1973 VS. 1977
SIXTH DISTRICT MEMBER BANKS**

	<u>1973</u>	<u>1977</u>
PROFITABILITY		
Percentage of Equity Capital, including All Reserves		
Income after taxes and before securities gains (losses)	12.60	8.89
SOURCES AND DISPOSITION OF INCOME		
Percentage of Total Assets		
Total operating income	6.86	7.60
Salaries, wages, and fringe benefits	1.42	1.58
Interest on deposits	2.50	3.01
Net occupancy expense of bank premises	.21	.29
All other operating expenses	1.45	1.80
Total operating expense	5.58	6.78
Income after taxes and before securities gains (losses)	.98	.70
RATES OF RETURN ON SECURITIES AND LOANS		
Return on Securities		
Interest on U. S. Treasury securities	6.01	6.73
Return on Loans		
Interest and fees on loans	8.52	9.45
Net losses (-) or recoveries (+) on loans	-.28	-.57

earnings since 1973, returns would have been much higher last year. Increased provisions for loan losses have also reduced the return on loans. Even though it declined during 1977, this expense was still about double its 1973 level. When the rise in loan loss provisions is subtracted from the net interest gain, last year's return on loans was no better than in 1973. The revenue gains from higher interest income were consumed by higher interest expenses and provisions for loan losses.

Increases in banks' noninterest expenses have contributed to the erosion of peak returns on assets as well. Clearly, District banks as a group will not surpass 1973 earnings rates until they increase their net return on loans and securities, reduce expenses as a percent of total assets, or both. The prospects for profitability approaching previous peak levels, however, appear brighter at this time than at any time since earnings began to recover in 1976.

John M. Godfrey

G. William Miller, Chairman Board of Governors of the Federal Reserve System

*Remarks by Chairman Miller before
the Bay Area Council, San Francisco,
California, June 27, 1978.*

It is a special pleasure for me to be here today for my first appearance on the West Coast as a member of the Federal Reserve family. However, I'm surprised to be here in this capacity, just as many of you are surprised to see me, because I never expected to be a banker of any kind. And I certainly never expected to be a central banker.

When President Carter announced last December that he would nominate me to be Chairman of the Board of Governors, **The Wall Street Journal** headlined the story with "William Who?" That was a wonderful headline. It is now my ambition to qualify for a similar headline four years from now. Because if, in four short years, the Chairman of the Federal Reserve is so obscure that no one remembers his name, then inflation will have abated, the dollar will be strong, the stock market will be at new highs, and America will be enjoying an unparalleled period of prosperity.

In other words, I will be forgotten—but the world will be better off!

Meanwhile, such is not the case and all of us have our work cut out for us. I say, "all of us" because the task ahead is one that requires the involvement of every American, public and private. Each of you has an important stake in the outcome. Each of you has a critical role to play. What happens over the next few years depends as much upon you as upon the President or the Congress or anyone in Washington or in Sacramento. And the need for responsive and responsible action is urgent.

How Our Difficulties Developed. The past dozen years have been characterized by dramatic shocks and discontinuities. The war in Vietnam was divisive. The state of domestic tranquility was interrupted by civil disorders. Failure to pay for that war planted the seeds of inflation.

The threat of inflation led to imposition of wage and price controls which proved to be unworkable, inequitable and ineffective. The international monetary system broke down. With wage and price controls holding down the lid, the U.S. economy was reflat and allowed to build up a high-pressure head of steam. When the controls were lifted, the steam blew off producing double-digit inflation and double-digit interest rates.

To compound the difficulties, the oil boycott ushered in a five-fold increase in world petroleum prices. Then the Water-gate incident, and its aftermath, led to a general public disaffection with all institutions, public and private. Finally, there was the great recession of 1974-75, with 9 per cent unemployment and the greatest economic distress since the Depression of the 1930's.

Recent Recovery Still Leaves Uncertainties. We are now in the fourth year of economic recovery from those troubled times. The level of prosperity has advanced considerably. Social and political conditions have become more stable. Yet, in the face of progress, there remains nagging uncertainty. This is not because of any lack of agreement on economic goals. There is a universal accord that our objectives should be full employment, price stability and a sound dollar.

The uncertainty arises because many have come to question whether those goals can be attained.

I am convinced that America's economic goals can be achieved. The means to do so are at our disposal. All that is required is the will. We should realize that there is a confluence in our individual self-interest that compels us to join together in a common effort. Divided, we shall realize none of our goals. United, we shall accomplish them all.

Inflation Is Our Most Serious Problem. Inflation is now our most serious domestic problem. It is the number one issue not because it has precedence over the quest for full employment, but because under present circumstances it is the primary obstacle to achieving full employment. Inflation is inextricably linked with unemployment. Our hopes for full employment on a continuing basis depend upon wiping out the virulent disease of inflation.

Inflation destroys values and incomes. It dries up job-creating investments, impairs the prospects for new housing and other construction, and breeds recessions. It creates financial strains for individuals, businesses and governments, accelerates government spending, causes higher interest rates and disrupts international trade and the stability of the dollar. It is especially hard on the poor, the elderly and those who live on fixed incomes. In short, inflation is the most disruptive force in our economy today. It is the "cruellest tax" of all.

Perhaps the best way to illustrate the clear and present danger of inflation is to consider the consequences for young people who are graduating this month from America's colleges and universities. If inflation should be permitted to continue at the present annual rate—expected to be 7 per cent or more this year—then when today's college graduates reach normal retirement age, the dollar they now hold will be worth less than a dime. At age 65, the dollar of today's graduate will be worth less than 10 cents.

We cannot let that happen to our young people—or to Americans of any age—or to the world. We simply must prevail.

The Role of the Dollar. The international value of the dollar is also related to inflation. The decline in the dollar since last September can be traced to the record U.S. trade and current account deficits and to the level and persistence of U.S. inflation rates. The decline in the dollar itself adds to inflationary pressures as the goods we import cost more and competitive constraints on domestic producers are reduced.

The United States has a special responsibility to maintain a sound and stable dollar. It is the currency for most international trade and finance. It is the principal reserve asset for the world's monetary system. The dollar is therefore the key to world economic progress. And in our own self-interest, we need a sound dollar to avoid disruptions in our patterns of international trade and investment and to dampen inflationary pressures here at home.

Energy Is an Important Factor. One important factor in all of these considerations is energy. America was fortunate to be able to develop as a nation by utilizing the

seemingly boundless resources of a vast, almost unpopulated continent. The availability of abundant and inexpensive energy fueled the growth of a great industrial economy. But, with 6 per cent of the world's population consuming 30 per cent of its energy, it was inevitable that a day of reckoning would come. The forces of supply and demand came into play with a vengeance.

In 1973, the United States paid about \$8 billion for imported oil products. Last year, the import bill was \$45 billion. This enormous shift contributed to the large U.S. trade deficit and to the pressure on the dollar. The task ahead is to convert our industrial, commercial, residential, transportation and public infrastructures into more energy efficient systems. We need to conserve present energy reserves, to reduce dependence on foreign petroleum, and to change over to alternate, more economic energy sources. This process will certainly take a decade or longer.

Economic Problems Are Interrelated. It is clear that our economic problems are interrelated. Inflation contributes to the decline of the dollar. The decline of the dollar contributes to inflation. Inflation drives up interest rates and breeds recessions which cause unemployment. Unemployment causes large Federal deficits which contribute to inflation.

Our task is to break the vicious circle. In endeavoring to do so, we can learn from history, even though the lessons of the immediate past are not encouraging.

Perhaps it is time for us to take new directions to help shape a stronger America and a better world.

Greater Emphasis Needed on Investment. One such new direction would involve a conscious shift in the philosophy behind U.S. economic policy from less emphasis on "demand" or "consumption" management to more attention to "supply" or "investment" management. Let me cite two periods when leading world powers have experienced hyper-inflation.

The first occurred in 16th century Spain. The discovery of the New World gave Spain access to vast amounts of gold and silver. Gold from the new world introduced massive unearned purchasing power into Spain which drove prices up perhaps a thousand per cent or more. That purchasing power did build great palaces and

did provide the most elegant life style that had ever been experienced up to that time in Europe. However, the use of resources was for consumption, with little attention to investments for the future. So, by the 17th century, Spain had run through its wealth and was economically barefoot.

Is there a parallel in our 20th century experience? Through the printing presses, there has been a massive creation of unearned money and credit. The United States has built the most affluent nation ever known, with the highest standard of living for the largest number of people. Is this to be another example of overindulgence in consumption? Will we neglect essential investments and deplete our capacity to provide for future generations? Will the legacy of our time be an economic desert?

Reduction of Government Sector. A second new direction would be to shift resources from the public sector to the private sector. The present percentage of our Gross National Product represented by government spending—Federal, state and local—has grown steadily until it may have reached the point of being counter-productive. During the last decade, it has become apparent that government spending does not always produce the desired results—economically or socially—and may not be the most effective way of reaching our desired objectives.

Amidst growing disenchantment, a more promising course would be to return more spending decisions to individuals and to businesses, where the cumulative effect of thousands and millions of private initiatives will be more efficient in sustaining and expanding economic progress. America needs to return to greater reliance upon the inherent vitality of the private enterprise system.

New Directions: Eight Points of Strategy. The New Directions for economic policy should include specific strategies and quantitative targets to give all of us a clear picture of where we are going. With such a blueprint, it would be possible to evaluate all proposed policies and actions as to their contribution toward achieving the established goals.

Perhaps this could best be understood by designing a model economy that would represent the ideal condition sought within a reasonable time, perhaps five or six or

seven years in the future. Then our economic policies could be directed on steady course to reach those targets. The components of such a model might include the following:

First, a balanced budget with full employment. With the steps already taken or planned, the budget deficit for fiscal year 1979 is now expected to be \$50 billion or less, down from the original \$60 billion. The trend should be continued with a reduction to less than \$40 billion for FY 1980, to less than \$20 billion in 1981 and to a balanced budget in 1982.

Second, the percentage of Federal expenditures should be reduced gradually over a five to seven year period from 22 per cent of GNP to 20 per cent. Even though the Federal Government would still be spending more, such a program would mean Federal spending of \$50 to \$60 billion less than otherwise would be the case, and these resources could be shifted back to the private sector.

Third, there should be a policy to achieve a substantial increase in business fixed investment. The United States has been neglecting its capital base. We are falling behind other principal nations: Japan spends 21 per cent of its GNP for capital investment, Germany 15 per cent. The United States, 8 or 9 per cent. Over the years, we have fallen behind in our productive capacity, our efficiency, our productivity and our technology. One technique in stimulating more capital investment would be a substantial liberalization of depreciation guidelines—with five year write-off for productive equipment—so that cash flows from risk investments would justify the investment.

Later, there could be the possibility of examining other capital formation areas for stimulating private investors and for encouraging entrepreneurship. But overall the goal should be over the five or seven year period to increase capital spending from 9 per cent to 12 per cent of GNP.

Fourth, we should have an active policy with respect to housing, which in many past cyclical periods has fallen substantially below demand. In the next five years, it would be appropriate to see housing production increase each year by 75,000 to 100,000 units until we reach a level

consistent with our housing needs. To the extent that the boom-and-bust housing cycles of the past can be replaced by more stable production, costly bouts of periodic underbuilding and overbuilding will be avoided. As a result, greater efficiency would be achieved in the use of resources in home building and related sectors of the economy.

Even more important, a gradually increasing annual pace of home building over the next 5 years could help to accelerate the slow process of upgrading our Nation's stock of housing—our most valuable item of private physical wealth. Moreover, an enlarged supply of new dwellings could reduce upward pressures on general housing prices. It could also better accommodate the evolving needs of new households for adequate quarters, and the replacement of older dwellings that no longer conform to the minimum shelter requirements of a dynamic society.

Fifth, there should be a vigorous program to expand exports, with a definite goal over the next five to seven years to increase our exports from 7 per cent of GNP to 10 per cent, in line with secular growth in imports. This would go far in helping to correct the balance of payments deficits which have plagued us for some time and which have undermined the value of the dollar.

Sixth, as the program progresses, and as the capacity to shift resources to the private sector emerges, there would be opportunities for additional tax reductions for individuals consistent with the goal of a balanced budget, and also consistent with the purpose of reducing government expenditures and giving more spending decisions back to people.

Seventh, high priority should be given to a serious and sustained effort of regulatory reform to reduce the unnecessary, costly and inflationary burden of government on people and on businesses.

The Federal Reserve has itself taken an important step in this direction. Early this month, the Board of Governors approved a comprehensive plan for a major review of all our regulations and related interpretations and rules to see where improvements might be made and outdated requirements eliminated. We seek to reduce our own regulatory burden.

And eighth, there should be a definite commitment to reduce inflation on a steady basis, at the rate of one-half to three-quarters of a per cent per year until we reach our goal of price stability, full employment and a sound dollar.

Short and Long Term Responses. These, then, are eight suggestions for New Directions as part of an overall strategy that, if pursued vigorously and continuously, would see us overcome within a reasonable time—within an attainable period—the terrible economic disease which now threatens our vitality.

Since I have been in Washington, most of my attention has been directed to short-run problems. The dilemma we face at the Federal Reserve is in trying to react against inflation in the short term, and in trying to shape a coordinated economic policy so that the Federal Reserve and monetary policy is not left to do the job alone. A great deal of progress has been made in that regard. It is encouraging to witness the change of attitudes in Washington and to see the specific concrete steps that have been taken in response to the awakened realization of the clear and present danger of inflation.

But we still face a difficult challenge in the period immediately ahead. In the next few quarters, we must be able to exercise restraint sufficiently to overcome inflationary pressures, but without overdoing it so as to trigger an economic downturn. If we fail, we will face either a period of even more cancerous inflation or a period of recession, or possibly both.

To succeed will require the best skills that can be marshalled—from all those who hold responsibilities in the government and from all those who have responsibilities in the private sector.

Overcoming Inflation and Achieving Goals. My message to you tonight is simple: inflation is a terrible problem. We must conquer it. In the short term we have a very difficult task to tread our way through a narrow passage. In the longer run, with a united country, we have the means to achieve our economic goals. And when we do, economic stability, full employment and a sound dollar will not only contribute to our own well being but also will offer the best prospects for peace and prosperity throughout the world. ■

market extensions—acquisitions of banks in separate banking markets. As a consequence of this type of expansion, multibank holding companies are mostly multimarket organizations represented in a number of geographically dispersed banking markets by at least one banking subsidiary. And, not surprisingly, this trend has led to multimarket organizations competing with one another in many different markets.

There has been little analysis of the competitive behavior of multimarket banking firms. Correspondingly, and perhaps more important, little is known of the impact these multimarket organizations have on local market competition. Conceptually, firms competing in a large number of dispersed markets could exhibit a wide range of behavioral patterns, bounded at one extreme by a highly competitive behavior and at the other by some type of oligopolistic behavior based on collusion.

The Theory. The purpose of this study was to test empirically the “linked oligopoly” theory. According to that theory, the more often multimarket firms find themselves competing with one another in geographically dispersed markets, the less likely are these firms to undertake aggressive competitive actions in any one market for fear of retaliation in other markets where they may be more vulnerable. In effect, this theory suggests that the presence of a number of multimarket firms which compete with one another in a large number of markets tends to weaken competition in each of these local markets, regardless of the structure or degree of concentration of the local market.

The Method. The theory of linked oligopoly markets provided the hypothesis to be tested: As the number of meeting points (markets in which two or more multimarket firms compete) of firms represented in a given market increases, the competitive performance of that market is reduced.* Besides the number of meeting points, the portion of the

multimarket organizations’ total deposits which had been obtained from common markets was used as a measure of the links between the multimarket firms present in the local market. These two statistics were used both separately and combined in a multivariate equation designed to predict market performance. The test sample consisted of 47 banking markets in the state of Florida. The markets varied in size from 3 banks to 113 banks. A total of 31 multibank holding companies were represented in the sample; in 1974, they controlled 453 subsidiaries and over \$18 billion in deposits.

The Conclusions. The results of the empirical analysis support three major conclusions. First, multimarket links do affect the degree of competition within banking markets in Florida; i.e., the linked measures generally proved to be significant predictors of a market’s competitive performance.

However, no evidence was found to support the linked oligopoly hypothesis as presented. Where the linked measures proved to be statistically significant, they were positively associated with market competitiveness. The test results support, instead, the opposing notion of multimarket firms’ behavior: As the number of links between firms increases, the degree of market competition increases.

The procompetitive effects of market links are theoretically plausible in a case where the multimarket expansion activity of firms is legally constrained to a single state. This constraint limits the number of markets firms may enter and, hence, increases the likelihood that a number of multimarket organizations will serve all markets. At the extreme, all multimarket firms may meet in all markets; therefore, all of their sales or deposits may be derived from mutual markets. Multimarket firms would then be in very much the same position as in a single market, i.e., competing for a limited number of common customers. This reasoning leads to the third conclusion that multimarket links between organizations tend to increase the degree of competition within banking markets, at least in the case where a large number of firms meet in a large number of markets. ■

* The test of this hypothesis employed the same model used by Arnold A. Heggstad and Stephen A. Rhoades, Board of Governors, in their unpublished work, “Multimarket Interdependence and Local Market Competition.” Their conclusions, however, differ significantly from those reported here.