Volume Title: Federal Lending: Its Growth and Impact

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Chapter Title: Effects on Aggregate Economic Activity

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in the public's hands represented the accumulation of over thirty-five years of federal credit activity, reflecting a steadily upward trend.

The magnitude of these figures suggests that the influence of federal credit activities has been profound; their diversity greatly complicates the analysis of their effects, many of which have been unforeseen and unintended. In perhaps the most important segment of the study, the authors analyze the influence of federal lending on the economy as a whole; on allocation of resources among different sectors of the economy; and on the private credit market and practices ("institutional effects"). The latter two actually overlap, since it was found that the so-called institutional effects produced by federal credit aids may in turn produce material changes in the use of resources.

Effects on Aggregate Economic Activity

How did federal lending and loan insurance affect the general level of prices and the physical volume of production? And, have federal loans tended to amplify or to dampen business fluctuations in the past twenty years? The report goes into some detail on both these points.

Relation to GNP and the business cycle

In relation to gross national product, federal credit (the sum of loans, loan insurance and guarantees extended) first became a significant factor in the economy in 1932, when it rose from less than 1 per cent in previous years, to 3.7 per cent of GNP (Chart 3 and Table 8). Up to 1953 it has never been less than 2 per cent, and in the peak year of 1934 reached 9 per cent. Federal loans, deliberately employed to combat the Great Depression, became in the thirties a major economic force, equaling or outweighing federal expenditures.

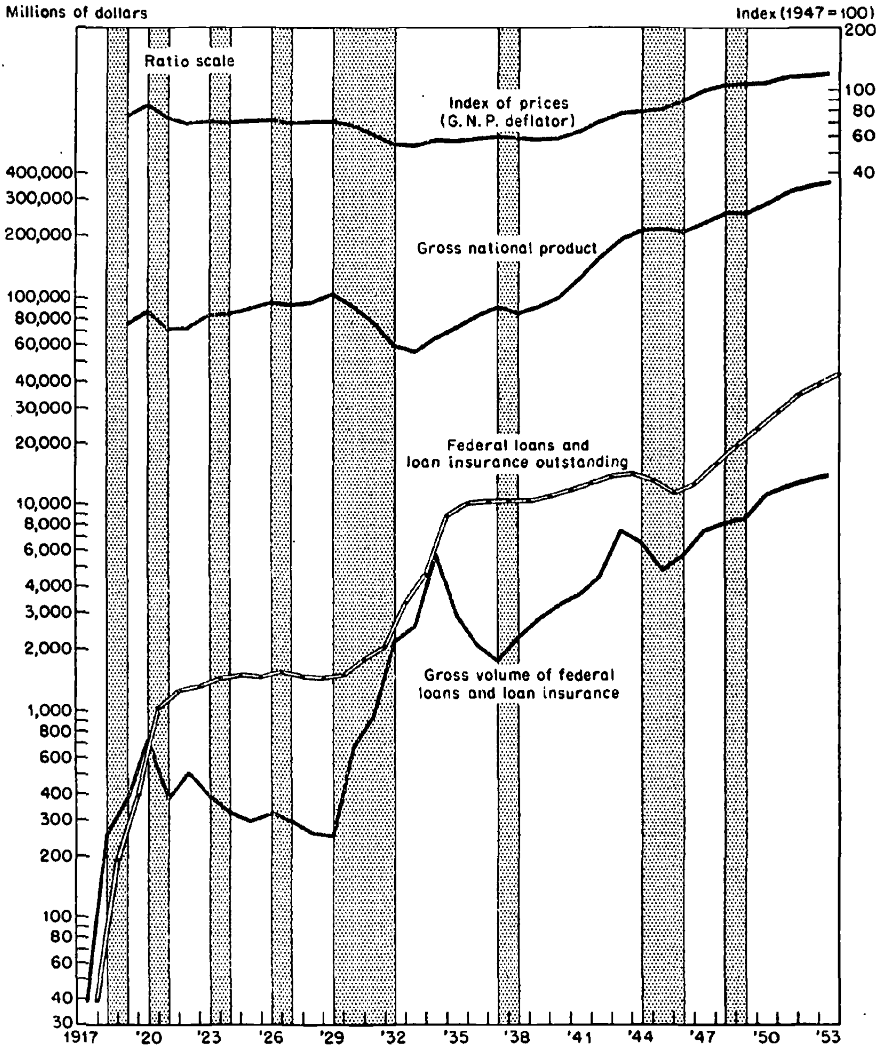
They were about neutral in their effects from 1936 to 1946, when large military expenditures dominated the economy. Thereafter, with rising volume in a period of high employment of economic resources, federal credit programs contributed appreciably to postwar inflation.

Their influence on business cycles is therefore mixed; they have operated at times in a stabilizing, and at other times, in a destabilizing direction. A modest tinge of counter-cyclical behavior is apparently due to faster repayment of loans in good times than in bad, rather than to conscious management of the programs. (Unified management explicitly to promote economic stabilization has, however, never been a major objective.)

On balance, however, the programs have operated more often than not to offset a contracting or depressed level of economic activity, and to

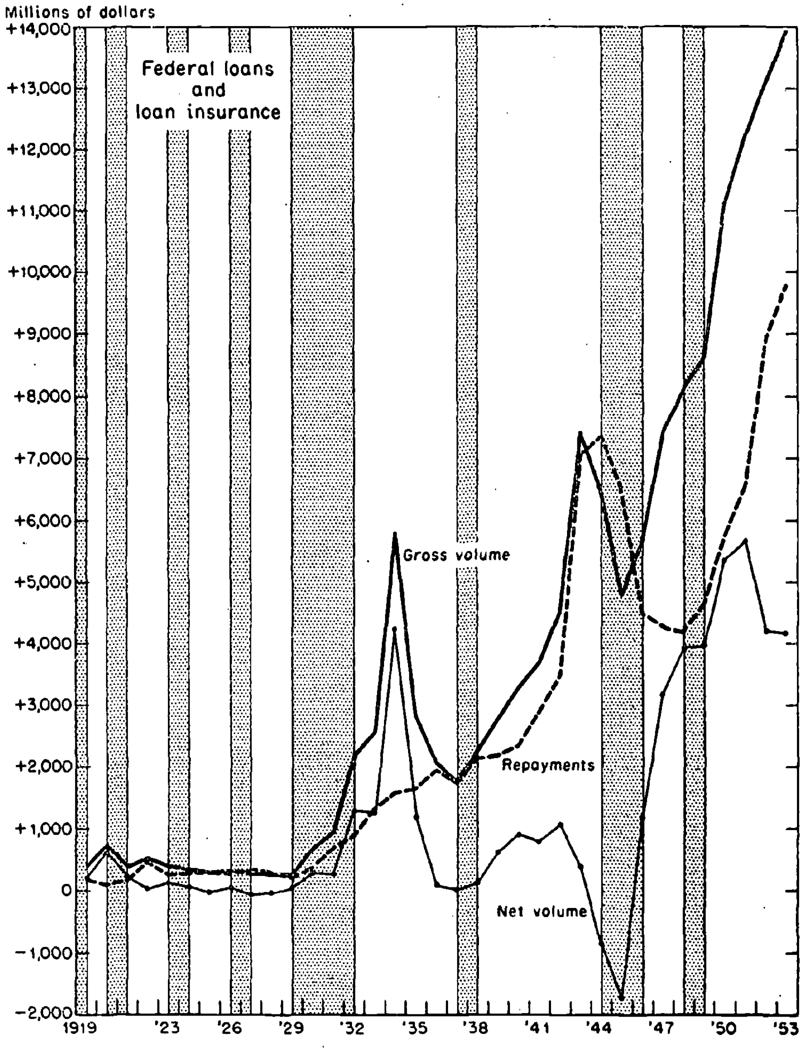
CHART 3

Annual Volume and Year-End Outstandings of Federal Loans and Loan Insurance, and National Product, 1917–1953



For data of lending and loan insuring by federal and federally sponsored agencies, and of gross national product, see Table 8. Price index is from the sources cited there for GNP, with the Kuznets series, 1919–1928, lowered by its 1929 ratio to the Commerce series (the latter, from Table 41 of the 1954 Supplement referred to). Shaded areas denote periods of contraction in business activity, as defined by National Bureau of Economic Research reference dates.

CHART 3 (*concluded*)



stimulate the economy in the early stages of a recovery movement.

Little consistency was observed in the movements of the major components of the federal loan programs. In many years the activities of federal agencies diverged from those of federally sponsored agencies. There were frequent divergences, too, in the movements of direct loans as compared to loan insurance, so that often the programs *offset* rather than reinforced one another's economic effects.

TABLE 8

Federal Loans and Loan Insurance in Relation to Gross National Product, 1919–1953

(dollar figures in millions)

YEAR	GROSS NATIONAL PRODUCT	VOLUME EXTENDED DURING THE YEAR: Amount	VOLUME EXTENDED DURING THE YEAR: As Percentage of GNP	OUTSTANDINGS AT YEAR END	NET CHANGE IN OUTSTANDINGS: Amount	NET CHANGE IN OUTSTANDINGS: As Percentage of GNP	REPAYMENTS OF LOANS AND EXPIRATIONS OF INSURANCE
1919	$ 75,027	$ 386	0.51%	$ 395	$ 205	0.27%	$ 181
1920	86,815	733	0.84	1,034	639	0.74	94
1921	71,081	379	0.53	1,260	226	0.32	153
1922	71,825	506	0.70	1,303	43	0.06	463
1923	83,711	382	0.46	1,431	128	0.15	254
1924	84,954	325	0.38	1,487	56	0.07	269
1925	88,530	294	0.33	1,476	−11	−0.01	305
1926	95,021	320	0.34	1,527	52	0.05	268
1927	93,409	292	0.31	1,474	−53	−0.06	345
1928	95,537	258	0.27	1,438	−36	−0.04	294
1929	104,436[a]	250	0.24	1,486	48	0.05	202
1930	91,105	667	0.73	1,779	293	0.32	374
1931	76,271	943	1.24	2,031	252	0.33	691
1932	58,466	2,175	3.72	3,324	1,293	2.21	882
1933	55,964	2,550	4.56	4,574	1,250	2.23	1,300
1934	64,975	5,827	8.97	8,830	4,256	6.55	1,571

1935	72,502	2,827	3.90	10,019	1,189	1.64	1,638
1936	82,743	2,031	2.45	10,101	82	0.10	1,949
1937	90,780	1,746	1.92	10,106	5	0.01	1,741
1938	85,227	2,250	2.64	10,215	109	0.13	2,141
1939	91,095	2,781	3.05	10,832	617	0.68	2,164
1940	100,618	3,260	3.24	11,749	917	0.91	2,343
1941	125,822	3,663	2.91	12,534	785	0.62	2,878
1942	159,133	4,522	2.84	13,598	1,064	0.67	3,458
1943	192,513	7,440	3.86	13,958	360	0.19	7,080
1944	211,393	6,482	3.07	13,079	–879	–0.42	7,361
1945	213,558	4,775	2.24	11,345	–1,734	–0.81	6,509
1946	209,246	5,658	2.70	12,520	1,175	0.56	4,483
1947	232,228	7,438	3.20	15,699	3,179	1.37	4,259
1948	257,325	8,108	3.15	19,636	3,937	1.53	4,171
1949	257,301	8,603	3.34	23,559	3,953	1.54	4,650
1950	285,067	11,154	3.91	28,936	5,377	1.89	5,777
1951	328,232	12,234	3.73	34,620	5,684	1.73	6,550
1952	346,095	13,144	3.80	38,817	4,197	1.21	8,947
1953	364,857	13,957	3.83	42,988	4,171	1.14	9,786

Volume of loans (including stock purchases) and loan insurance extended by federal and federally sponsored agencies, and amounts outstanding at year end, from *Federal Lending*, Tables A-1 and A-2. Gross national product (in current dollars) for 1929–1953 from *National Income Supplement, 1954, Survey of Current Business* (Department of Commerce), Table 2, p. 162; for 1919–1928 estimated by Simon Kuznets in *Supplement to Summary Volume on Capital Formation and Financing* (unpublished), Part A: Annual Estimates, 1919–1953, Variant III.

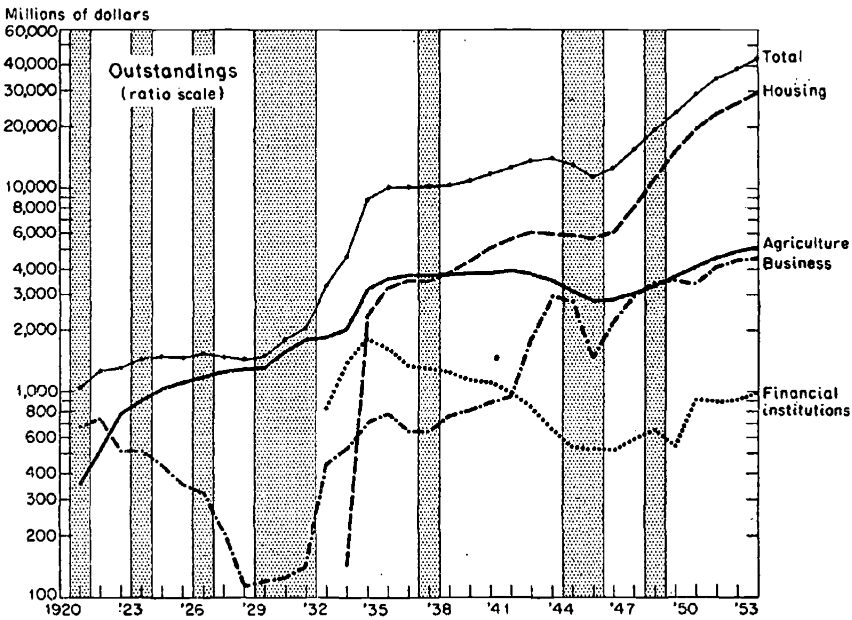
[a]Kuznets' figure, comparable with earlier years, is $101,465 million.

Direct lending by direct agencies showed the strongest effects in promoting economic stability; while loans by federally sponsored agencies and loan insurance operated more often than not to amplify cyclical swings. The federal land banks are an exception among the federally sponsored agencies since the banks greatly expanded their loans in the 1930's and their continuing statutory limitations have controlled and limited loan operations especially in inflationary periods.

In an analysis of gross credit extended annually to different sectors of the economy, the best counter-cyclical performance was shown by credit aids to housing (Chart 4). Farm mortgage lending also was generally counter-cyclical, in terms of net volume of credit flow. Aids to business and financial institutions reinforced or moderated the swings

CHART 4

Major Sectors of the Economy: Annual Volume of Federal Loans and Loan Insurance Utilized, and Year-End Outstandings, 1920–1953



Covers lending and loan insuring by federal and federally sponsored agencies, from *Federal Lending,* Tables A-1 through A-8. Total includes loans to minor governmental units and loans for miscellaneous purposes, as well as the components shown. Stock purchases identifiable as primarily credit aid are included; for other details, see Chapter 2, footnote 1, of the book.

Shaded areas denote periods of contraction in business activity, as defined by National Bureau of Economic Research reference dates.

with about equal frequency. A more consistent counter-cyclical record, in all sectors, however, was revealed when the *net* volume of credit flow was considered (because of the behavior of repayments mentioned above).

Relation to federal expenditures and federal monetary policies

Stimulation of production and increased employment may be achieved by the federal government in several ways: through loans and loan insurance, through grants, subsidies, and investments. The effect on GNP of a dollar of federal loans or loan insurance is probably greater in most instances than that of a dollar of outright federal expenditure, because the loan or loan insurance is more likely to be accompanied by private credit or by an equity investment by the borrower. Hence it is pertinent to appraise

CHART 4 (*continued*)

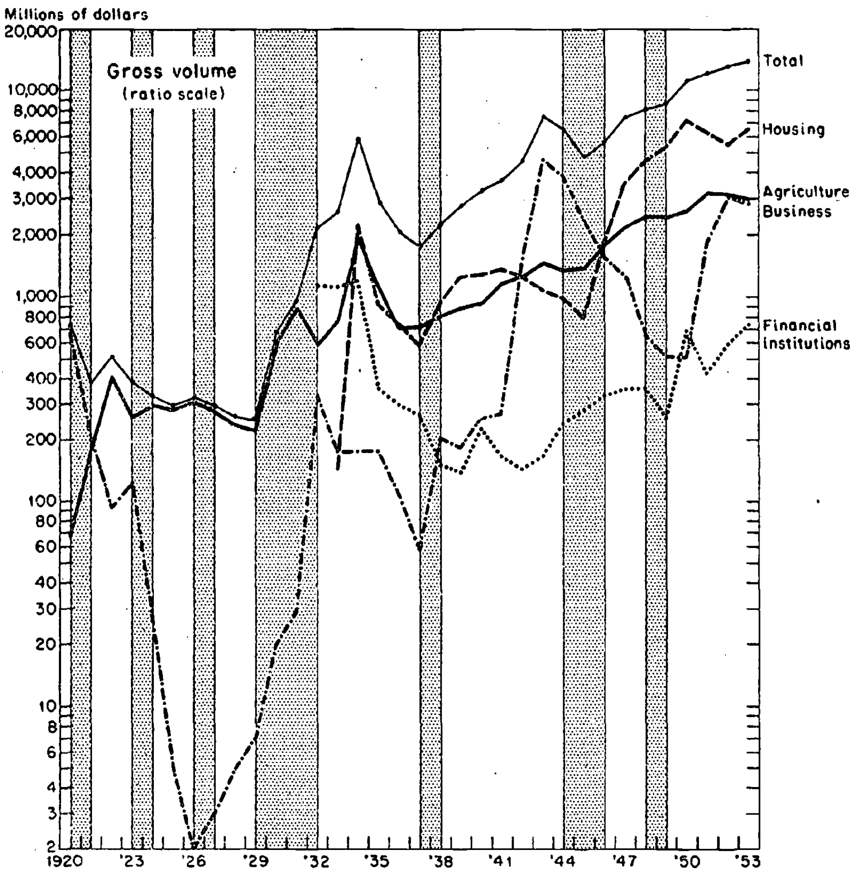
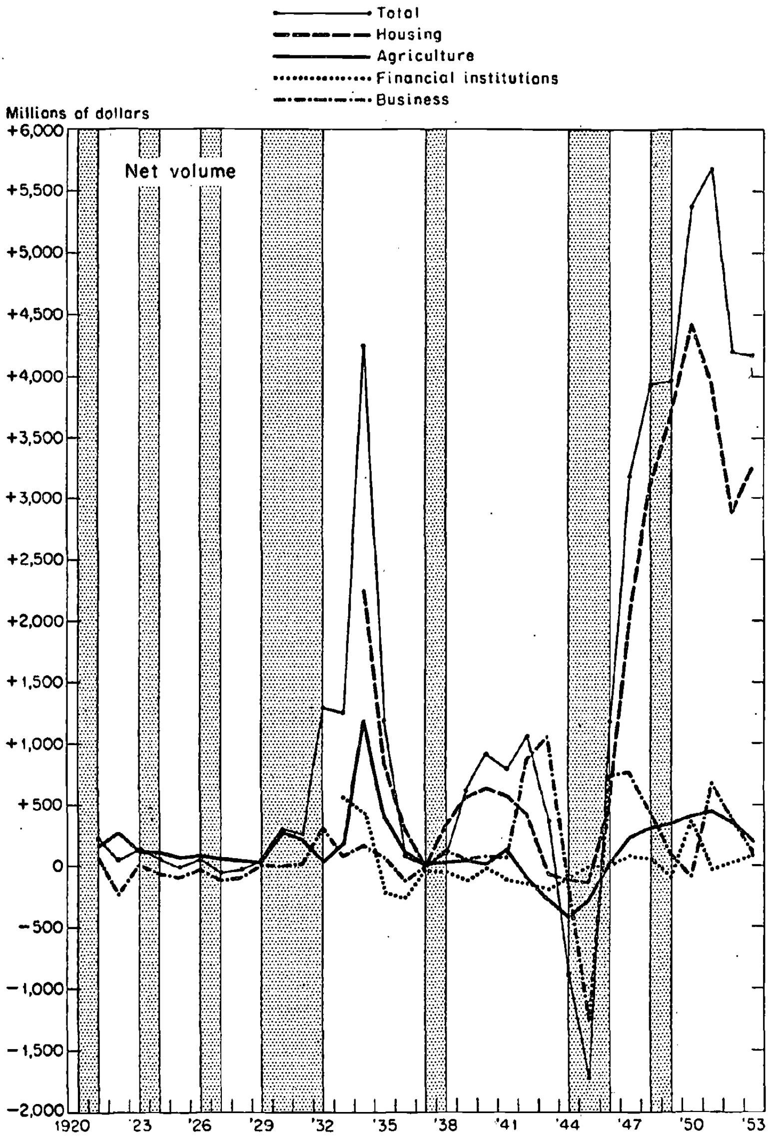


CHART 4 (*concluded*)

Federal Loans and Loan Insurance Utilized by Major Sectors



See notes placed with first panel of chart.

the importance of federal credit programs relative to federal expenditures, and to determine whether the two have moved together or oppositely in their cyclical effects.

Two types of comparisons were made: (1) between the gross flow of federal loans and loan insurance and the annual amount of federal expenditures; (2) between the net flow of federal loans and loan insurance and the amount of surplus or deficit in the conventional federal budget. The first is a comparison of gross amounts of funds injected into the economy; the second, of their net impact, when repayments of loans are assumed to have effects on private expenditures analogous to payments of federal taxes.

The annual volume of federal loans and loan insurance ran between one-fifth and three-tenths of the amount of federal expenditures during most of the thirties and during the postwar years 1947–53; in 1933 and 1934, on the other hand, it reached 51 and 78 per cent respectively, indicating the vital role of credit in the New Deal effort to restore prosperity (Table 9). In general over the period 1930 through 1953 – excepting the years 1942–46 – federal credit operations appear to have been at least as influential as determinants of total demand as were federal fiscal operations. However, the record does not reveal effective counter-cyclical coordination between federal financial policy in the two spheres; reductions in the net flow of loans and loan insurance have accompanied increases in budgetary deficits nearly as often as not, and conversely.

Nor do federal credit programs appear to have been effectively meshed with federal monetary policies to assist economic stabilization, a result which of course may be due to errors of management in either quarter, or to other factors. Stabilization would appear to require concurrent changes in both the net flow of Federal Reserve Bank credit and in the net flow of federal loans and loan insurance; however, the record reveals more years of divergent than of concurrent movement.

The net volume of federal credit (that is, loans and loan insurance and guarantees, exclusive of central bank credit) rose markedly during and after World War I but declined sharply in 1921. The net volume of central bank credit reached a peak in 1918, and was cut back drastically in the period 1918–21, rising sharply the following year. Thereafter, changes in both series were minor until the onset of the Great Depression, when both rose. Beginning in 1934, central bank credit was reduced and experienced little change until the exigencies of financing World War II brought a vast increase during the years 1942–44. The net volume of federal lending and loan insuring diminished drastically in 1935, and rose again during 1938–41. During 1943–45 it declined, principally in response to a reduc-

TABLE 9

Federal Loans and Loan Insurance, Federal Expenditures, Budgetary Surpluses or Deficits, and Federal Reserve Bank Credit, 1918–1953

YEAR	FEDERAL EXPENDITURES (million dollars)	FEDERAL SURPLUS (+) OR DEFICIT (—) (million dollars)	VOLUME OF FEDERAL CREDIT AS A PERCENTAGE OF FEDERAL EXPENDITURES	NET CHANGE IN FEDERAL CREDIT OUTSTANDING AS A PERCENTAGE OF BUDGET SURPLUS OR DEFICIT[a]: *Years of Surplus*	*Years of Deficit*	FEDERAL RESERVE BANK CREDIT: *Outstanding at Year End* (million dollars)	*Net Change* (million dollars)
1918	18,127	—13,420	1.4%	. .	—1.1%	2,498	+1,327
1919	11,730	—4,960	3.3	. .	—4.1	3,292	+794
1920	5,064	+1,368	14.5	+46.7%	. .	3,355	+63
1921	4,705	+267	8.1	+84.6	. .	1,563	—1,792
1922	3,553	+113	14.2	+38.1	. .	1,405	—158
1923	3,718	+387	10.3	+33.1	. .	1,238	—167
1924	3,345	+567	9.7	+9.9	. .	1,302	+64
1925	3,600	+220	8.2	—5.0	. .	1,459	+157
1926	3,614	+470	8.9	+11.1	. .	1,381	—78
1927	3,605	+483	8.1	—11.0	. .	1,655	+274
1928	3,755	+165	6.9	—21.8	. .	1,809	+154
1929	3,798	+445	6.6	+10.8	. .	1,583	—226
1930	3,809	+145	17.5	+202.1	. .	1,373	—210
1931	5,001	—2,333	18.9	. .	—10.8	1,853	+480
1932	5,083	—3,145	42.8	. .	—41.1	2,145	+292
1933	5,017	—2,543	50.8	. .	—49.2	2,688	+543
1934	7,495	—4,064	77.7	. .	—104.7	2,463	—225

1935	6,646	—2,854	42.5	..	—41.7	2,486	+23
1936	8,539	—4,206	23.8	..	—1.9	2,500	+14
1937	7,635	—1,888	22.9	..	—0.3	2,612	+112
1938	8,220	—2,670	27.4	..	—4.1	2,601	—11
1939	9,151	—4,300	30.4	..	—14.3	2,593	—8
1940	9,645	—3,934	33.8	..	—23.3	2,274	—319
1941	20,229	—11,762	18.1	..	—6.7	2,361	+87
1942	57,542	—41,461	7.9	..	—2.6	6,679	+4,318
1943	89,918	—55,691	8.3	..	—0.6	12,239	+5,560
1944	96,896	—53,650	6.7	..	+1.6	19,745	+7,506
1945	87,271	—43,594	5.5	..	+4.0	25,091	+5,346
1946	41,080	—2,512	13.8	..	—46.8	24,093	—998
1947	37,955	+2,434	19.6	+130.6	..	23,181	—912
1948	35,623	+5,241	22.8	+75.1	..	24,097	+916
1949	41,106	—3,592	20.9	..	—110.1	19,499	—4,598
1950	37,728	—422	29.6	..	—1,274.2	22,216	+2,717
1951	56,337	—3,358	21.7	..	—169.3	25,009	+2,793
1952	70,682	—5,842	18.6	..	—71.8	25,825	+816
1953	72,997	—9,157	19.1	..	—45.5	26,880	+1,055

[a]*Minus sign* indicates positive change over a deficit, or negative change over a surplus. *Plus sign* indicates positive change over a surplus, or negative change over a deficit.

Source: Federal credit series computed from *Federal Lending,* Tables A-1 and A-2; for dollar totals of the gross volume extended during each year and of the net volume (net change in outstandings), see Table 8, above. Federal expenditures and budgetary surplus or deficit for 1918–1932 (estimated on a calendar-year basis from monthly figures) are from the *Annual Reports* of the Secretary of the Treasury; and for 1933–1953 (calendar years) are from the *Treasury Bulletin,* February 1954, p. 5, and April 1954, p. 1. Federal Reserve Bank credit through 1941 is from *Banking and Monetary Statistics* (Board of Governors of the Federal Reserve System, 1943), Table 102, pp. 373-377; for 1942–1953, from *Federal Reserve Bulletins.*

tion of guarantees of defense loans, and by roughly the same amount that Reserve bank credit increased. There was a sharp contrast between the reduction in the net advances of central banking credit in 1945–46 and 1948–49, in an effort to curb price inflation, and the large annual increases in federal loans and loan insurance outstanding. Since 1949 the two series have followed quite similar courses.

Thus, on the whole, the movements of federal loan and loan insurance policy were even less well correlated with monetary than with fiscal policy. Such a divergence might be defensible under some circumstances, of course, but the record reveals defects in federal monetary policies as well as inadequacies in the management of the lending and loan insurance programs, from the standpoint of economic stability.

In short, comparisons (1) between federal credit activities and fiscal and central banking activities, and (2) between all of these federal financial operations and business cycle behavior give a checkered result. The principal generalization that appears warranted by the investigations is that diversity of movement and lack of counter-cyclical coordination have characterized federal financial operations in the past.

One characteristic of federal credit programs has been that, once set in motion, they tended, in the aggregate, to expand, regardless of general economic conditions. Aggregate federal loans and loan insurance continued to rise through the late thirties and early forties during economic recession and expansion alike. The most important unstabilizing effects were experienced during the post-World War II boom, when, largely as a result of federal insurance and guarantee of home mortgage loans, federal credit operations worked counter to federal fiscal and monetary policies. The authors give this explanation:

". . . Aggregate federal credit is a mosaic of many pieces: each particular program has been designed to accomplish some special purpose and has been managed with that end in view, often without regard to its effects on over-all economic stability. Yet in the aggregate the programs have at times exerted a profound influence on prices and production."

Effects on Allocation of Resources

Because of the many other, and more important influences at work, the effect exerted by federal credit programs on the allocation of resources is subtle and difficult to trace. Still, the investigators were able to identify certain changes in employment and output, prices, incomes and financial position of producers, and regional shifts in economic activity, which seem attributable to the operations of the federal credit programs.