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## CHAPTER XVI

### BANKING TRANSACTIONS AS RELATED TO INCOME

In the United States, payments of any size are usually made by check, hence the volume of banking transactions is one of the most accurate criteria of the activity of business in the country. When business is active, there is, of course, a tendency for production, and therefore realized income, to be large. *A priori*, therefore, one would expect some rather definite mathematical relationship to exist between the volume of banking transactions and that of the realized income of the people of the United States. Table CXX and Chart 58 are devoted to an analysis of such relationships. The first comparison is made between the sum of loans and private deposits and the total realized income of the inhabitants of the nation; the second comparison between the volume of bank clearings and total realized income; and the third, which covers only the years since 1919, between the total volume of debits to private accounts and realized income.

#### **Bank Credit and Realized Income.**

The sum of loans and private deposits measures largely the extent of credit issued by banks. The graph in Chart 58 indicates that the ratio of combined loans and private deposits to realized income has pursued a somewhat upward trend, marked, however, by a definite depression during the war period. It appears, therefore, that the percentage of the business of the nation done by banks is tending slightly to increase, but that this general tendency was interrupted during the period of the World War. In times of depression, such as 1914 and 1921, the ratio of loans and private deposits to total realized income is abnormally high, while, in years of relative prosperity such as 1909, 1913, and 1923, the ratio tended to be somewhat below the trend.

In considering bank clearings as a measure of business activity, one should keep in mind the fact that the area covered by banks reporting to clearing houses is gradually being extended, and that this fact is likely to affect the trend of the ratio of bank clearings to entire realized income.

The graphs in Chart 58 show that the trend of this ratio has

TABLE CXX

BANK ACTIVITY COMPARED WITH  
THE REALIZED INCOME OF THE PEOPLE  
OF THE CONTINENTAL UNITED STATES

YEAR	SUM OF LOANS AND PRIVATE DEPOSITS <sup>a</sup> (MIL- LIONS)	BANK CLEAR- INGS <sup>b</sup> (MIL- LIONS)	DEBITS TO PRIVATE ACCOUNTS <sup>c</sup> (MIL- LIONS)	REALIZED INCOME OF THE PEOPLE OF THE CON- TINENTAL UNITED STATES <sup>d</sup> (MILLIONS)	RATIO TO ENTIRE REALIZED INCOME OF		
					Sum of Loans and Private Deposits	Bank Clearings	Debits to Private Accounts
1909	25,338	\$165,780	°	\$29,605	.856	5.60	
1910	27,742	164,020	°	31,430	.883	5.22	
1911	28,889	160,210	°	31,858	.907	5.03	
1912	30,916	174,020	°	33,977	.910	5.12	
1913	32,044	169,950	°	35,723	.897	4.76	
1914	33,806	155,240	°	35,647	.948	4.35	
1915	34,857	187,820	°	37,205	.937	5.05	
1916	40,585	261,430	°	43,288	.938	6.04	
1917	46,884	306,920	°	51,331	.913	5.98	
1918	50,332	332,280	°	60,408	.833	5.50	
1919	57,947	417,770	566,000	65,949	.879	6.33	8.58
1920	68,803	452,110	611,000	73,999	.930	6.11	8.26
1921	64,256	356,210	500,000	63,371	1.014	5.62	7.89
1922	64,922	382,820	545,000	65,925	.985	5.81	8.27
1923	70,302	413,490	582,000	74,337	.946	5.56	7.83
1924	74,221	455,420	612,000	77,135	.962	5.90	7.93
1925	80,513	512,070	704,000	81,931	.983	6.25	8.59
1926	84,968	523,840	750,000	85,548*	.993*	6.12*	8.77*
1927	88,263	554,990	823,000	88,205*	1.001*	6.29*	9.33*
1928	92,630			89,419*	1.036*		

<sup>a</sup> Taken from *Annual Reports* of the U. S. Comptroller of the Currency.

<sup>b</sup> Taken from *Statistical Bulletins* of Standard Statistics Co.

<sup>c</sup> See *Journal of the American Statistical Association*, Sept. 1928, p. 303.

<sup>d</sup> See Table VIII.

° Data not available.

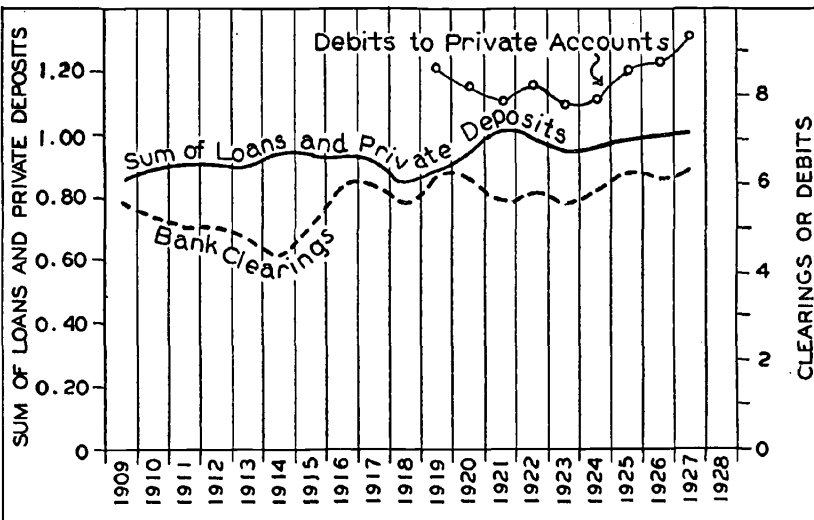
\* Preliminary estimate.

roughly paralleled that of the ratio of loans and private deposits to realized income; but the first mentioned trend, though in general upward, was broken by a large depression from 1910 to 1915, the deepest part of the trough being in 1914. The graph gives no indication that there is any definite relationship between the size of this ratio and the prosperity of the country.

CHART 58

BANK ACTIVITY COMPARED WITH  
THE REALIZED INCOME OF THE PEOPLE  
OF THE CONTINENTAL UNITED STATES<sup>a</sup>

(FIGURES PLOTTED ARE RATIOS OF THE QUANTITIES  
NAMED TO THE REALIZED INCOME)



<sup>a</sup> For data, see Table CXX.

Ratio to Total Realized Income of Debits to Private Accounts.

Bank clearings obviously represent but a fraction of the total banking business of the area tributary to clearing houses, for only those checks cashed at a bank other than that on which they are drawn pass through the clearing house. Under these circumstances, it is evident that, for any specified area, the volume of debits to private accounts represents much more completely than does the volume of bank clearings the aggregate amount of business carried on by aid of bank facilities. Chart 58 indicates that the movements of the ratio of such *debits* to aggregate realized income paralleled closely the movements of the ratio of *bank clearings* to aggregate

TABLE CXXI

BANK ACTIVITY COMPARED WITH  
THE TOTAL INCOME OF THE PEOPLE  
OF THE CONTINENTAL UNITED STATES

YEAR	SUM OF LOANS AND PRIVATE DEPOSITS <sup>a</sup> (MILLIONS)	BANK CLEARINGS <sup>a</sup> (MILLIONS)	DEBITS TO PRIVATE ACCOUNTS <sup>a</sup> (MILLIONS)	TOTAL INCOME OF THE PEOPLE OF THE CONTINENTAL UNITED STATES <sup>b</sup> (MILLIONS)	RATIO TO TOTAL INCOME OF		
					Sum of Loans and Private Deposits	Bank Clearings	Debits to Private Accounts
1909	\$25,338	\$ 165,780	°	\$31,158	.813	5.32	
1910	27,742	164,020	°	32,496	.854	5.05	
1911	28,889	160,210	°	34,020	.849	4.71	
1912	30,916	174,020	°	39,182	.789	4.44	
1913	32,044	169,950	°	30,145	1.063	5.64	
1914	33,806	155,240	°	41,798	.809	3.71	
1915	34,857	187,820	°	52,877	.659	3.55	
1916	40,585	261,430	°	28,506	1.424	9.17	
1917	46,884	306,920	°	18,196	2.577	16.87	
1918	50,322	332,280	°	43,380	1.160	7.66	
1919	57,947	417,770	566,000	54,071	1.072	7.73	10.47
1920	68,803	452,110	611,000	72,681	.947	6.22	8.41
1921	64,256	356,210	500,000	88,262	.728	4.04	5.67
1922	64,922	382,820	545,000	75,377	.861	5.08	7.23
1923	70,302	413,490	582,000	72,819	.965	5.68	7.99
1924	74,221	455,420	612,000	90,191	.823	5.05	6.79
1925	80,513	512,070	704,000	85,369	.943	6.00	8.25
1926	84,968	523,840	750,000				
1927	88,263	554,990	823,000				

<sup>a</sup> For sources of information see Table CXX.

<sup>b</sup> See Table LII.

° Data not available.

realized income. The fact that the former ratio seems to fluctuate more widely is due merely to the fact that it is a larger ratio. If plotted logarithmically, it would be readily seen that the amplitude of the vibrations is proportionally about the same as that of the vibrations of bank clearings. Records of the total volume of debits to private accounts are not available for years prior to 1919.

While the three sets of ratios all move about their respective trend lines, their oscillations are so much larger than those in the

curve representing income that it is evident that none of them can safely be used to forecast the realized income of the nation.

In Table CXXI, the sum of loans and deposits, bank clearings and debits to individual accounts have been compared with the estimated *total* income in contradistinction to the *realized* income. None of the ratios show any definite upward or downward trend.